



ESTABLISHED 1859.

**Subscription: Fourpence a Week, Ten Shillings a Year.
Summer and Winter Numbers, 1/- per Copy.**

Remittances Payable to EDWARD HALSE.

Postal Orders and Cheques to be crossed "MARTIN'S BANK (LIMITED)."

CHIEF OFFICES: 42 CANNON STREET, LONDON, E.C.

BRANCH OFFICES: 231 ELIZABETH STREET, MELBOURNE,
AND 114A PITT STREET, SYDNEY.

**THIS JOURNAL is regularly supplied by subscription to the
whole of the Members of TWELVE PHARMACEUTICAL
SOCIETIES in the British Empire.**

CONTENTS: Vol. LI. No. 24.

	PAGE		PAGE
Australasian News	906	French News	904
Bankruptcies and Failures	925	Gazette	925
Business Changes	914	Irish News	903
"Camwal"	919	Legal Reports	916
Cash-chemists' Qualifying Ex-		Marriages	915
amination	924	More About the New Bill	927
Colonial and Foreign News	905	New Companies	923
Coming Events	933	Oil of Sandalwood	932
Correspondence:—		Our Town Traveller	914
Chemists and the Hospitals:		Pharmaceutical Society of Ire-	
P.A.T.A. Controversy	933	land:—	
William's Valedictory Male-		Council Meeting	903
diction; Proprietary Trade;		Scotch News	904
Nitrates in Drinking-water	934	Socialities	913
Mr. T. G. Forsbaw and the		The P.A.T.A.: Meetings in	
Pharmaceutical Council;		Dublin and Belfast	903
Re Rectification of the		Trade-marks Applied for	927
Register; Alleged Death of		Trade Notes	915
a Chemist from Worry;		Trade Reports	923
Dr. Priestley's Compound	935	Winter Session:—	
Legal Queries	933	Pharmaceutical Society	903
Miscellaneous Inquiries	936	Chemical Society	910
Deaths	915	Society of Chemical Industry;	
Deeds of Arrangement	926	Newcastle-on-Tyne Chem-	
Editorial Comments:—		ists' Association; North	
The P.A.T.A. Controversy ..	920	Staffordshire Chemists' As-	
Intercolonial Reciprocity ..	921	sociation	911
Bulls and Bears in Zanzibar		Sonthampton Chemists' As-	
Cloves	922	sociation; Bradford Chem-	
Labby One of Us; Tracing		ists' Association; Cam-	
P.A.T.A. Goods; New Spirit		bridge Pharmaceutical As-	
Order; Willing to Wound		sociation; Monmouthshire	
but vet, &c.; The Infinitely		Chemists' Association;	
Small; Xanthorrhoea Resins ..	923	Aberdeen Society of Chem-	
English News	902	ists and Druggists	912

TEN GUINEAS IN PRIZES.

Each copy of THE CHEMISTS' AND DRUGGISTS' DIARY, 1898, sent out contains a coupon-postcard with the following questions:—

1. Whose advertisement is best calculated to promote business?
2. Which illustration or design do you consider most attractive?
3. Which advertisement, occupying a page, do you consider the best?
4. Which advertiser, who has less than a page, utilises his space to the best advantage?
5. Vote for the proprietary article advertised in the DIARY (medical, or of any other character) which has your best wishes.
6. Which is the most happily named article advertised?

Will subscribers please fill in the answers which they think most appropriate and return by an early post? They may delegate the task to one of their staff or family, in which case the person answering will, if successful, get a share of the ten guineas.



POOR-LAW DISPENSERS are getting on with their Association (p. 902)

THE PRESENT POSITION of the clove market is discussed on page 922.

SIX PHARMACEUTICAL ANNUITANTS were elected on Wednesday (p. 902).

THE STYLE OF EXAMINATION requisite in cutting pharmacy is described on page 924.

GOOD MEETINGS were held in Dublin and Belfast last week in support of the P.A.T.A. (p. 906).

NERVIGORIN is a tonic containing nux vomica, the maker's assistant explained at an inquest (p. 903).

SIR HENRY BURDETT writes to urge chemists to assist in the sale of the Hospital Fund Stamp books (p. 933).

JAPANESE CAPSICUMS, which have recently come into the market, are pretty, but deficient in pungency (p. 909).

TWO COUNTY COURT CASES are reported which show the danger of having goods carried at "owner's risk" (p. 918).

AT THE MEETING OF "CAMWAL," reported on p. 919, the Chairman gave some hints on developing the syphon-trade.

A REPORT OF THE ACTION Bevan, &c., v. Kumpff, Eckenstein, &c., in regard to cod liver oil transactions is printed on p. 916.

THE IRISH PHARMACEUTICAL COUNCIL had little to do last week except to discuss the marking of the Preliminary examination (p. 906).

THE VICHY SPRINGS may soon revert to their owners, the Government of France, but the company offer 1,000,000*fr.* a year rental for renewal of the lease (p. 904).

MESSRS. FARR AND WRIGHT find green extracts to be so variable and weak that they recommend alcoholic extracts of the dried drugs to be used instead (p. 903).

MR. HORACE BROWN, F.R.S., finds that the vitality of seeds is not affected by a temperature of -182° C., therefore their protoplasts are inactive until germination begins (p. 910).

MR. FORSHAW, whose name we reported last week was removed from the list of members of the Pharmaceutical Society by the Council, sends us his comments on this proceeding (p. 935).

THE NEW SOUTH WALES AND VICTORIA BOARDS OF PHARMACY have agreed upon a scheme of reciprocity, which includes uniform examinations in both Colonies (p. 921).

SEVERAL CASES under the Sale of Food and Drugs Act are of interest. In one it was admitted that when camphorated oil is asked for camphor-liniment B.P. cannot be claimed. Some licensed victuallers and others have been summoned by the South Shields Town Council for selling soda-water not of B.P. strength (p. 917).

THE P.A.T.A. CONTROVERSY, which has been a lively feature in our correspondence columns during the past two months, seems drawing to an end. Mr. Beecham, whose turn it was, does not reply to Mr. Glyn-Jones's last letter, but that gentleman replies to Mr. Day's last (p. 933). We make some remarks on the controversy on p. 920.

IN AN APPEAL CASE brought by the Pharmaceutical Society, the Queen's Bench Division have refused to reverse the judgment of the Reading County Court judge in respect to the sale of weed-killer by the assistant to a seedsman. They hold that as a County Court judge found as a matter of fact that the defendant did not intend the weed-killer to be sold, the unauthorised act of his assistant did not render him liable to the penalty (p. 915).



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Election of Annuitants.

A meeting of the subscribers to the Pharmaceutical Benevolent Fund was convened at 17 Bloomsbury Square, W.C., on Wednesday at 12 noon, for the purpose of electing six annuitants. The matter was purely formal, as six persons only were proposed by the Council—viz., Charles Clode (65), Willesden Green; Charles B. Collett (67), Clapham; Thomas Evans (74), Liverpool; George Foster (83), Camberwell; Jane D. Starling (84), Bexley Heath; and Tonkin Young (69), Barry. The President declared these to be duly elected. Before this was done, however, Mr. G. J. Knight objected on the ground that it was possible to make this irregular procedure a precedent for the future. He thought there were several people other than those selected who were worthy of being added to the list of candidates. The President pointed out that the Council distinctly wished it to be understood that there was no intention of departing from the ordinary method of electing annuitants. Mr. W. H. Baines also protested against the elections being conducted without voting-papers, and said that he would be unable to subscribe if the system of election were to be altered. Mr. Butt explained the process of selection of candidates, and showed that the present election was the result of the liberality of the subscribers in so enriching the Fund during the year that the Council felt justified in recommending the election of the whole of the candidates. Mr. Bottle and the Vice-President followed on the same lines. Mr. Knight and his friend Mr. Baines were not, however, persuaded to withdraw their opposition, and the motion was carried by the remaining subscribers present. A vote of thanks moved by Mr. Baines was passed and acknowledged, and the meeting terminated.

The Coroner Sympathised with the Doctor.

At an inquest held at Grimsby last week, it appeared that a girl named Mary Ann Wright, aged 19 years, daughter of Mr. and Mrs. Wright, caretakers of Dr. Stephenson's surgery, had died through taking an apparently large dose of laudanum. In the course of his evidence Dr. Stephenson said deceased had been in the habit of assisting in the surgery, compounding simple drugs and helping to keep the books. In the surgery he kept laudanum and the deceased had access to it. The Coroner said there was nothing to show that the act was intentional, and the jury would doubtless sympathise with Dr. Stephenson that the death should have occurred at his surgery. A verdict of death from misadventure was returned.

Charge of Forgery and Fraud.

John Smith (35), well dressed and of gentlemanly appearance, describing himself as a merchant, was charged at the Marylebone Police Court on December 4 with obtaining several sums of money by means of forged cheques. One of the witnesses was Mr. Ernest Henry Shearn, chemist, of Camden Road, who said the prisoner called upon him on November 16, and represented that he had come from Mr. Claremont, solicitor, of Camden Road, and asked to be obliged with change for a cheque for 3*l*. Not knowing Mr. Claremont the witness refused to grant the request. He was, however, impressed with what he thought the *bona fides* of the prisoner, and advanced him 1*l*. on the cheque. The money was to be refunded next morning, and the cheque returned. He did not call again, so Mr. Claremont was communicated with, and he declared the cheque a forgery. The prisoner was a stranger to him. Mr. Claremont went to the

shop of another tradesman named Ford to warn him of the prisoner, when he met the latter coming out of the shop. Mr. Ford made a communication to Mr. Claremont, who went after the prisoner and stopped him. The witness wanted the prisoner to go back with him, but the prisoner hesitated and then bolted up the road. He was pursued and given into custody. Other cases were alleged against him, and he was committed for trial.

The Chemist's Light.

Mr. Ernest Bailey, chemist and druggist, Broadgate, Coventry, was fined 11*s*. 6*d*. costs at the Petty Sessions on December 1 for driving at night without lights. Mr. Bailey said he was detained at Pailton longer than he anticipated, and added that he left the vehicle in charge of a man while he went and borrowed some lamps.

Amateurs and Sleeping-draughts.

At the Bristol Assizes last week, before Mr. Justice Hawkins, Andrew Garrod, a youth, was charged with causing the death of his brother William, a sailor, by administering as a sleeping-draught an overdose of morphine. The deceased took too much liquor, and disturbed his mother. With the consent of the family the prisoner got a sleeping-draught from his master's, a veterinary surgeon, and put a dose in a glass of beer. After kissing the prisoner and his mother the deceased fell asleep, but he never woke, and the prisoner found that in ignorance he had administered enough to kill nine men. The Judge said it appeared that the prisoner administered a drug to quiet the deceased, which drug he had seen his master use for horses. He would advise Mr. Leigh (the veterinary surgeon) to put dangerous poisons under lock and key in future. Mr. Metcalfe (for the prosecution) said that in justice to Mr. Leigh he must say it was labelled "Poison." The Judge said he knew that, but it would be better to lock poisons up. His Lordship discharged the prisoner.

Stealing from Drug-stores.

At Blackburn Petty Sessions on December 2, two lads, Stafford (16) and Twist (15), were charged with stealing 11*s*. and a number of articles from Thompson's Drug-stores, Blackburn. Both lads had been employed at the drug-stores, and they had admitted the pilfering. The Magistrates said they did not desire to send the lads to prison, although they deserved it. They would each be bound over to be of good behaviour for six months in the sum of 5*l*., and to come up for judgment at the end of that time.

Football.

A match was played at Wormholt Farm, Shepherd's Bush, on December 4, between teams from the Metropolitan College of Pharmacy and the Westminster College of Pharmacy. The former won by 5 goals to none.

A match between the Pharmaceutical F.C. and a scratch team representing Burgoyne, Burbidge's & Co. was played at Wormholt Farm on Saturday last, and resulted in a win for the former by 6 goals to nil.

Public Dispensers' Association.

Another meeting of Poor-law dispensers was held last Monday evening at the Sessions House Hotel, Clerkenwell, when an executive council was appointed, consisting of Messrs. Jones (Poplar), Miller (St. Pancras), Smith (Lewisham), Spencer (Marylebone), and Clark (Paddington), with power to add to their number. There were about twenty-five members present. Rules were drawn up and passed.

Another meeting was held on Tuesday evening last, at Trinity Church Schools, Gray's Inn Road, when the rules already formulated were adopted after a somewhat protracted discussion. An annual subscription of 2*s*. 6*d*. was agreed upon.

A Chemist's Lecture.

Mr. Leo. Atkinson, chemist and druggist, gave an interesting lecture at St. George's, Brockley, last week, on "Bacteria," for the benefit of the organ-fund. Having explained the necessity of bacteria in fulfilling the ordinary processes of nature, and described the important part they

fill in many arts and manufactures, Mr. Atkinson stated that the enlargement necessary to show a consumption microbe the size of the letter "i" in this type would make a fly's tongue, if enlarged in the same ratio, stand one-and-a-half times the height of St. Paul's Cathedral. The methods of artificially cultivating the various disease microbes were explained and illustrated—micro-photographs of the most important being shown on the screen. Whilst relating the history of cholera, Mr. Atkinson referred to the alarm caused by an alleged outbreak in Greenwich a few years ago, the general symptoms being very like Asiatic cholera; the death rate, however, was infinitely less, viz., 11 in 245 cases, and the "comma bacillus" was never detected in any *post-mortem* examination. An original photograph was shown of the organism that was found to have polluted the water and caused the epidemic. Although, the lecturer said, our present knowledge does not justify any definite statement of method that will insure certain disinfection in every case or condition, it is a distinct gain to have a knowledge of the danger to which we are exposed, and the best means of resistance.

Itinerant Medicine-vendors in Blackburn.

The Blackburn Town Council, at their meeting on December 2, ordered that no itinerant vendors of medicine should be permitted to take spaces in the market-place.

Chemist's Shop Broken Into.

At Birmingham Police Court, on Tuesday, George Turner, filer, was charged with breaking into the shop of Joseph Haden, chemist and postmaster, 147 Vaughton Street. The offence was alleged to have occurred in July last. Prisoner was seen at the door of the shop with another man. They forced the lock, but were disturbed, the other man being captured before they could remove any goods. Prisoner at the time made his escape. He was remanded.

Nervigorin Poison in Patent Medicines.

Mr. G. L. Drew held an inquiry at Hammersmith on Tuesday concerning the death of William Harris, 59, carpenter, lately residing at 63 Latimer Road, Notting Hill, and who died on Friday last. His son stated that the deceased had for a long time suffered from a liver complaint, and for two or three years had doctored himself with a patent medicine called "Nervigorin." He used to drink to excess occasionally, and although he had been out of work for ten weeks he was not low spirited or depressed. The widow said he used to take the Nervigorin for a pain in his back. Dr. Whitlock, who was called in on the day preceding his death, said he had made a *post-mortem* examination, and found that the cause was syncope from fatty degeneration of the heart. The stomach, the doctor added, was quite normal. The Coroner handed the witness a large bottle marked "Nervigorin, infallible remedy for all nervous diseases. A. B. Hughes & Co., 372 Harrow Road, W." and asked if that had anything to do with the cause of death? Dr. Whitlock replied in the negative. The Coroner: Do you know what it contains? Witness: I have been told there is bromide in it. The Coroner: There must be something else in it, or it would not bear the label on the back (referring to small label on the back) "Owing to a new construction placed on an old Act of Parliament this preparation must be labelled Poison, but its composition is not altered in any way, and so long as it is used according to directions no harm can ensue." Does it contain strychnine? A representative of Messrs. Hughes: Yes, sir; it contains a little nux vomica. The Coroner did not think it was necessary to call further evidence, or to call the chemist, as the medical evidence showed that the death arose from purely natural causes, although if anyone took several doses of the medicine it might be a case of poisoning. The jury returned a verdict in accordance with the medical evidence.

Using the Röntgen Rays.

Mr. Cockle, chemist, High Street, Lynn, was successful the other day in localising, by means of the Röntgen rays, a needle which had been in the hand of a Mrs. Bugg for some four years, and from which she suffered much pain. Mrs. Bugg went to the hospital, and by means of the radiograph the needle was successfully removed. The whole operation

took little less than an hour, and the hand is satisfactorily recovering.

The Great Fire in London.

Mr. John Hodgkin, F.I.C., F.C.S., of Messrs. Herrings & Co., wholesale druggists, Aldersgate Street, E.C., has this week been one of the principal witnesses at the inquest regarding the origin and spread of the recent fire in the City. Mr. Hodgkin alleged that the fire brigade had a deficiency of hose and coal, and that the men did not go about their work so well as they might have done; also that in some parts they were not properly officered. It transpired during Mr. Hodgkin's evidence that his firm's premises were seriously threatened, and were under-insured, that Mr. Hodgkin had supplied some of the fire-engines with coal all day, and that he personally directed some firemen in their work. Mr. Hodgkin has practical experience as a fireman, having been a member of Messrs. Howards & Sons' brigade. He was severely cross-examined, but did not come off second best.

Hard Labour for Embezzlement.

Charles Bird, a traveller, employed by Mr. F. Wale, wholesale drysalter and druggist, Midland Street, Leicester, was charged at that town on Friday with embezzling 17s. 4d., the money of his employer. Prosecutor said he engaged prisoner as traveller and warehouseman at 30s. a week. His duties were to solicit orders and to collect money from customers, settling up day by day. Prisoner had not accounted for sums amounting to 17s. 4d. Prisoner, who had nothing to say, was sentenced to six weeks' hard labour.



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Pharmaceutical Society of Ireland.

A Preliminary examination will be held on Monday, January 3, 1898. Applications should be lodged not later than Monday, December 20.

Christmas and the Schools.

The Pharmaceutical School of Chemistry will be closed from December 23 to December 30, both dates inclusive; and the Pharmaceutical School of Botany and Materia Medica will be closed from December 24, 1897, to January 3, 1898, both dates inclusive.

Personal.

The friends of Mr. Denis P. Holland, chemist, Dungarvan, entertained him to dinner at Coghlan's Hotel last week, prior to his departure for New York, and presented him with a purse of sovereigns and other tokens of their esteem.

Mr. Walter J. Healy, M.P.S., late of Messrs. J. Leonard & Co., apothecaries and chemists, Dublin, has been appointed manager of the English department of Messrs. Moussempe et Cie., of the Pharmacie Sainte-Eugénie, Biarritz.

Saving on the Turpentine.

At a meeting last week of the Youghal Guardians, one of the members of the Board objected to the use of turpentine in the infirmary as an extravagant expenditure, and said paraffin oil would do as well. This was objected to by the medical officer on the score of health. The Guardians being equally divided, nothing was done.

One of the South Dublin Extras.

At a meeting of the South Dublin Guardians on December 2 the Master reported having received a requisition from Mr. Madders, the apothecary, for a quantity of mist. spirit. vini gall. and bromide, ordered by the workhouse medical

officer, which items were not in the contract-form. Dr. Stafford, the Local Government Board inspector, said the mixture was simply egg-flip, and should not be ordered as a medicine. In any case, it could be "compounded" in the house. In reply to a Guardian, Dr. Stafford said egg-flip was not recognised as "medicine," and the doctors had already been warned by the L.G.B. against their prescribing it. The requisition in question was for "egg-flip to be kept in stock." This was ridiculous, and if the medical officers persisted in disobeying the regulations of the L.G.B. they would be severely dealt with, and, in his opinion, the Guardians should bring them up and suspend them. The Guardians protested against the suggestion to interfere with the doctor's discretion, and said the whole question would have to be settled in the law courts. They ordered the necessary egg-flip, despite the warning of the L.G.B. inspector.

Limits for Medicines.

The Local Government Board has written to the Midleton Guardians intimating to them that carbelic soap, scented soap, and peppermint-lozenges could not be regarded as medicines. There was no objection to the Guardians supplying these articles if they thought fit, but the cost could not be included in the medicine-account for the purpose of obtaining recoupment.

Set-back in the Belfast Mineral-water Trade.

In a statement of the goods imported into and exported from the port of Belfast during the last three months, it is stated that 2,632 tons of mineral and medicinal waters were exported from the city, as against 2,991 tons in the corresponding period of 1896.



Local newspapers containing marked items of news interesting to the trade are always welcomed by the Editor.

Marrying Two Doctors.

An exceptional wedding was celebrated at Dundee the other day, when Miss Agnes J. Anderson, M.B., C.M., daughter of Mr. A. B. Anderson, chemist, was married to Dr. MacLaren, of Oughtibridge. The Rev. Dr. Colin Campbell, in proposing the health of the young couple at the wedding-breakfast, said he thought he was the first minister in Dundee who had had the pleasure of marrying two doctors.

British Medical Association.

It has now been decided that the sixty-sixth annual meeting of the British Medical Association will open in Edinburgh on Tuesday, July 26, 1898. As already announced, Sir Thomas Grainger Stewart will be the President of the year, and his connection with the Edinburgh University has enabled the Association to obtain the use of the medical school class-rooms for the sectional meetings. The general meeting will, it is expected, be held in the new McEwan Hall, which was opened by Mr. A. J. Balfour last week, and which accommodates between 3,000 and 4,000 people. Addresses are to be delivered by Professor T. R. Fraser in medicine, by Professor Thomas Annandale in surgery, and by Dr. Batty Tuke in psychological medicine. In connection with the meeting the usual annual exhibition will be held in the Volunteer Drill-hall, Forrest Road, adjoining the University and Royal Infirmary buildings. Dr. Norman Walker has been appointed Secretary to the Exhibition Committee, and to him applications for space should be addressed.

Edinburgh Athletic Club.

The sixth annual smoking-concert in connection with this club was held on Monday evening in the West End Café. Mr. D. B. Dott, the Honorary President, was in the chair, and

the company, which included several well-known pharmacists and some members of the medical profession, numbered over 150. The principal event of the evening was the presentation of a handsome gold watch to the Hon. Secretary, Mr. J. P. Gibb. Mr. Gibb has been Secretary of the club since its formation, six years ago. Mr. Dott in making the presentation stated that the membership now stood at 120, and that the success of the club was largely due to Mr. Gibb. Mr. D. S. Duncan, Secretary of the Scottish Amateur Athletic Association (an old record holder), spoke of Mr. Gibb's abilities, both as a cross-country and a track runner. Mr. Gibb made a suitable reply, and the rest of the evening was occupied by a long and varied programme of music and song.

French News.

(From our Paris Correspondent.)

A CIRCULATING LIBRARY for medical and pharmaceutical books has been opened by a publisher in the students' quarter of Paris. The terms are 5 f. (4s.) per month. A subscriber can have what books he requires, and keep them any length of time.

A SERIOUS FIRE occurred last Thursday in an alcohol distillery at Maisons-Alfort, near Paris. The conflagration was caused by the rupture of an electric current, which caused a spark to fall into a reservoir of alcohol. The distillery was burnt to cinders, and a girl of 17 lost her life.

PARIS ACADEMY OF SCIENCES.—The last addition to the ranks of this Academy is Professor Ditte, of the Faculty of Sciences, who was elected last week as a member of the Section of Chemistry in the place of M. Schutzenberger, deceased. M. Ditte is principally known by his researches on the dissociation of salts by water.

UNDER A NEW POSTAL CONVENTION, which will come into force early in the New Year, a parcels-post service is to be organised between British India, Australia, and France. The maximum weight will be five kilogrammes. Hitherto this service has been carried on *via* England. Wholesale druggists in the countries interested ought to find the new service of utility.

M. ALEXANDRE JOLY died on December 3 after a short attack of pneumonia. He was fifty-one years of age, was Director of the Chemical Laboratory at the Superior Normal School, Paris, and Assistant-professor at the Faculty of Sciences. He made a speciality of the chemistry of rare metals, and his researches in connection with phosphorus acids, especially hypophosphorous acid, are also well known.

VICHY-WATER AND THE STATE.—It is well known that the Vichy mineral-water springs are the property of the State, being farmed out by the latter to a company. The removal of the contract is just now under consideration by the French Government, it appearing that, as a health resort, Vichy is no longer able to compete with the attractive watering-places of Germany. A section of the Chamber of Deputies was in favour of the State taking over the entire management of the springs and the sale of the water, but the offer of the company at present enjoying the monopoly to pay 1,000,000f. (40,000l.) per annum for a continuation of the privilege will probably prove too tempting to be refused.

FRENCH AGENTS FOR BRITISH HOUSES.—The Secretary of the British Chamber of Commerce in Paris has issued an extensive list of agents and travellers in various trades who are open to represent British firms in France. Under the heading of chemicals we find four applicants: five wish agencies for drugs or pharmaceutical products; four for soap, perfumery, and toilet-articles; one for brushes; and one for surgical and dental instruments. The majority of the applicants are resident in Paris. Facilities are afforded by the Chamber of Commerce for making inquiries; but the introductions are, of course, made without any guarantee or liability on the part of the Chamber.

THE LEGAL SIDE OF PHARMACY.—Last Tuesday, December 7, a barrister, M. Paul Coutant, commenced a series of lectures on the "Professional Legislation of Pharmacy" at the Paris School of Pharmacy. These lectures will be

continued every Tuesday during the winter session. M. Coutant has divided his subject into three parts—(1) the normal practice of pharmacy; (2) illegal practice of pharmacy; and (3) various questions of interest to pharmacists and herbalists. He will deal with the opening and management of a pharmacy, the sale of drugs and preparations, doctors' prescriptions, secret remedies, poisonous substances, falsified drugs, inspection of pharmacies, weights and measures, prices, city dues (Octroi), professional secrecy, legal proceedings, assistants, disloyal competition, trademarks, mineral waters, penal and civil responsibility, imprudence, negligence, and encroachments on the domain of pharmacy.

Colonial and Foreign News.

SHORTER HOURS IN NEW YORK.—The drug-trade section of the New York Board of Trade and Transportation has condemned the proposals of druggists' assistants to shorten shop-hours by shifts, and is to oppose the Bill in which the proposals have been formulated for enactment.

RAILWAY CONTRACT.—Messrs. C. E. Gardner & Co., of Port Elizabeth, have again secured the contract for the supply of drugs, chemicals, and sundries to the Cape Government Railway (Midland system) for the year ending December 31, 1898. This firm have supplied this system of the railway department since January 1, 1895.

STRANGE FATALITY.—A man who was looking into the attractive show-window of Mr. H. B. Morse, druggist, Philadelphia, a few weeks ago allowed the ferule of his umbrella (which had a steel stick) to touch the bottom of the arc light above him, and the current passed through his body, killing him instantaneously. He was standing on an iron grating.

A BIG FIRE.—A serious fire occurred at the works of the Nutriment Manufacturing Company, Union Stock-yard, Chicago, last month. The company is a branch-department of the firm of John Wyeth & Brother, Philadelphia, and the factory was totally destroyed, the damage amounting to 20,000*l.*, of which, it is reported, only half is covered by insurance.

CAUCASIAN LIQUORICE.—The Caucasian liquorice-root crop of 1896-97 was of average quantity, but sold at high prices, owing to the scarcity of labour for collecting, curing, and pressing the root; this was especially felt in the districts of Geokchai and Agdash, in consequence of the large number of persons employed in the cultivation of cotton. The district which produces most root is Erivan. The season could not have been better so far as the curing was concerned, the summer having been an exceptionally dry one. The crop was approximately 11 tons, of which the bulk is shipped to America. A small quantity has been used in the manufacture of liquorice-paste and has been exported to Europe. The prospects for the coming season are doubtful.

POISONOUS PROPRIETARIES.—The Ohio Food Commissioner has upset the American drug-trade once more by proceeding against a firm of wholesale druggists and a department store for selling without labelling "Poison" certain poisons alleged to be constituents of patent medicines. Analyses were made by Mr. Louis Schmidt, Cincinnati, and Mr. M. L. Durner, Columbus, of the undermentioned proprietary articles. The reports stated that the poisonous ingredients are those mentioned in parentheses:—Winslow's soothing-syrup (morphine gr. $\frac{1}{16}$ per oz.); Ayer's cherry pectoral (morphine gr. $\frac{1}{16}$ per oz.); Scott's emulsion (morphine gr. $\frac{1}{16}$ per oz.); Dr. Birney's catarrh-powder (cocaine hydrochlorate 2½ per cent.); Dr. Agnew's catarrh-powder (cocaine hydrochlorate 5.32 per cent.); bromidia (chloral hydrate gr. xv. per dr.), and Dr. Wheeler's nerve-vitaliser (chloral hydrate gr. v. per oz.). There is nothing surprising about these analytical results, except the statement about Scott's emulsion, which is so extraordinary that we are not surprised to hear that the New York house of Scott & Bowne, immediately on hearing of the matter, issued a circular in which they say "that they unqualifiedly and without equivocation or evasion of any kind, and with all the force and emphasis which can be given to truth, declare that never, in their business career, have they used a single grain of the alkaloids

of opium in Scott's emulsion." They are taking steps to present the facts before the Ohio Court. [In consequence of this allegation, and the bearing of the Pharmacy Act upon it, we purchased a bottle of Scott's emulsion, and analysed it, but fail to detect any trace of morphine or any other alkaloid in it. We then called upon the English firm, Scott & Bowne (Limited), to see what they had to say about the matter, and they as emphatically as the New York house denied that they have ever used morphine or any other poison in making the emulsion. They courted the fullest investigation about the matter, even to an examination of the process of manufacture. This we took full advantage of, and the total absence of alkaloids from the preparation was proved to the hilt. Although the English firm is quite distinct from the American one, and the emulsion sold in this country is made in London, it is but fair to Scott & Bowne (Limited) that these facts should be stated along with the Ohio allegation.—ED. C. & D.]

Australasian News.

NEW ZEALAND BILL OF THE SALE OF FOOD.—A Bill introduced into the New Zealand Legislature by the Hon. W. C. Walker provides that articles of food in tins or other closed packages must bear plainly the true name and avoirdupois weight of the article of food contained therein. Butter in pats or rolls must be stamped with the weight. Condensed-milk must have a similar label to other articles of food, but showing also the proportion of its various chemical constituents.

VON MUELLER MONUMENT.—It is proposed to erect a monument of grey granite, 23 ft. high, over the grave of Baron von Mueller in St. Kilda Cemetery, also that the supplemental volume of his "Flora Australiensis," which he was preparing for the press at the time of his death, together with two volumes on his administration as Director of the Botanical Gardens, embracing a biography and complete bibliography of his writings, should be published. His executors ask for the loan of any of his letters, or the communication of incidents in the Baron's life. The Rev. W. Potter, "Vonmueller," Arnold Street, South Yarra, Victoria, will receive biographical materials and subscriptions to the monument.

THE NEW ZEALAND CENSUS.—At the last New Zealand census in 1891 the pharmaceutical chemists and assistants in the colony numbered 530. The 1896 census-returns give the number as 656, of whom 21 are females. Of these, 528 males and 18 females are put down as chemists and druggists, 65 males and 1 female as apprentices, 13 males and 1 female as clerks, 7 males as dispensers, 1 female as dispenser's assistant, 6 males as messengers, and 16 males as salesmen. Medical men in practice numbered 411 against 362 in 1891. Medical students numbered 48; "irregular medical practitioners," 82, 69 males and 13 females. These "irregular ones" included 5 Chinese doctors, 31 herbalists, and 11 medical galvanists. Dentists, including apprentices, numbered 275 against 145 in 1891.

THE NEW SOUTH WALES SOCIETY A LIMITED COMPANY.—The Pharmaceutical Society of New South Wales has taken steps to form itself into a limited company under those provisions of the Companies Act which allow of the incorporation of associations not dividing profits. The lines of the Victorian Society have been closely copied, but there are a few differences. The life-membership is fixed at 10*l.* in New South Wales, against an entrance fee and 15 guineas in Victoria. The payment for reinstatement of a member whose name has been removed for failure to pay his subscription is fixed at not less than 10*s.* nor exceeding five guineas in New South Wales, against 2*s.* 6*d.* and a guinea in Victoria. The annual subscription for apprentices is 5*s.* in Victoria; for assistants and apprentices, 10*s.* 6*d.* in New South Wales. The government of the N.S.W. Society is to be in the hands of a council of eleven, all of whom are to be in business on their own account. The latter provision is not found in the Victorian rules. The method of election has not been adopted from Victoria, and is much simplified. Only those members residing in New South Wales will be entitled to vote.

Pharmaceutical Society of Ireland.

THE monthly meeting of the Council was held on December 1 at Dublin, Mr. Downes (President) in the chair. The other members of Council attending were Mr. Beggs (Vice-President), Messrs. Wells, Grindley, Porter, Bernard, and Dr. Walsh.

CORRESPONDENCE.

The REGISTRAR read a letter from Sir George Duffey, M.D., returning heartfelt thanks to the Council for the resolution of condolence which they had passed with Lady Duffey and himself on the occasion of their recent bereavement.

A letter from the Civil Service Commissioners enclosed twelve copies of regulations relative to an examination to be held on January 4 next, for the situation of dispenser in her Majesty's Naval Hospitals.

THE PRELIMINARY EXAMINATION.

The REGISTRAR read the following letter from Mr. Spark-hill Brown and Dr. H. C. Tweedy, the examiners at the Society's preliminary examination:—

THE PRESIDENT, &c.—DEAR SIR,—You kindly offered to lay before the Council of the Society our views with reference to the proposed change in the requirements of the Preliminary examination. We should be glad to bring under their notice the following points:—(a) That the additional compulsory subject will add an hour to the length of what is already an exceptionally long examination (for one day). Even under past conditions the candidates' work has always shown a great falling-off in quality towards the end of the day—undoubtedly the result of sheer fatigue. The extra hour will intensify this evil and will tend to convert the examination, so far as the later subjects are concerned, into a mere test of physical endurance. (b) That whereas, as at present arranged, the number of marks for all the subjects totals up to exactly 100, the extra subject will bring the total to 110, necessitating a calculation of percentage in the case of each candidate before his success or failure can be determined. (c) That in number and variety of subjects, all of which are compulsory, the examination is gradually getting beyond what is generally understood by a Preliminary examination. Sir George Duffey's suggestion, in his report to the Privy Council, that Euclid should be relegated to the optional subjects, in order to make room for chemistry as compulsory, would, in our opinion, have been a highly satisfactory method of making a much-needed change.

Mr. WELLS said the Council very carefully considered the subject of making Euclid compulsory in the Preliminary examination two years ago, and if they were to throw it out now it would look as if they did not know their own mind. Every boy coming from school should know something of Euclid.

The PRESIDENT: The proper course would be to raise the marks in Latin and some other subjects, and have a total of 150.

Mr. BERNARD: Are there any marks for handwriting?

Mr. WELLS: Yes, it is taken into consideration.

Mr. BERNARD: I wish something was done to teach fellows to write. Not one assistant in ten writes a good hand.

The VICE-PRESIDENT: Not one man in fifty writes a legible hand.

Mr. WELLS: I wish you would refer to committee the question of the marking in Latin, which has never been definitely settled. There are not enough marks for Latin at present.

The PRESIDENT: The examiners have complained of candidates being passed who got only two marks in Latin. When the subject of this examination was last before the School Committee the idea discussed was that the examination should be made to extend over two days.

The letter was referred to the School Committee.

A DONATION

was received from the British Pharmaceutical Conference of a copy of their *Year-book* for 1897. Thanks were voted to the donors.

NEW MEMBERS, &c.

On the motion of the VICE-PRESIDENT, seconded by Mr. KELLY, the following were elected members of the Society:—Messrs. J. S. Ashe, G. Brown, W. Jones, and Miss A. S. Wyatt, all of Dublin.

On the motion of the PRESIDENT, seconded by Mr. GRINDLEY, the following were nominated for membership:—Messrs. John Rooke (Carlow), W. J. Dunwoody (Monaghan), William Gray (Belfast), and Charles S. Tynan (Carlow).

Reports from the Law and House Committees and other business were disposed of.

The P.A.C.I.

MEETING IN DUBLIN.

A MEETING of Dublin chemists was held in the Hibernian Hotel, Dublin, on the evening of December 3, for the purpose of hearing a statement from Mr. Glyn-Jones: and also for the purpose of considering the advisability of forming a local chemists' association for the district. Mr. R. J. Downes, President of the Pharmaceutical Society of Ireland, was voted to the chair, and among well-known chemists present were Messrs. Wells, Conyngham, Robinson, Dr. Walsh, Wm. McCarthy, W. A. Boyd, W. A. Smith, Grindley, J. Campbell, J. A. Walsh, J. Michie, J. J. Bernard, J. Turner, J. Burnet, G. M. Ryan, J. B. Jackson, M.D., Thos. Batt, L. Kingsmill, and Dr. McWalter.

Mr. Downes, in opening the proceedings, said the question of their profits was a crucial one with them. Mr. Glyn-Jones had come over to suggest that they should adopt a principle which had been found, to a certain extent, successful in England. He thought the fault lay with the retailers, and not with the wholesale men.

Mr. Glyn-Jones, in the course of a vigorous address, said excessive cutting, especially in proprietary articles, had compelled chemists to transact a large part of their business without any profit, and the varying prices of such goods caused bickering and annoyance to the retailer. Some of their competitors appeared not to be in business for the purpose of making a profit; but to the majority of them the question was one of increasing importance. They were all more or less interested in these goods. The term "proprietary article" did not mean patent-medicines only. In the highest-class businesses a large part of the turnover was derived from proprietary articles. He condemned the practice of selling one class of article without profit, or even at a loss, in the hope, and very often with the distinct intention, of making up for it by selling other articles at an exorbitant profit. Such a system was a dishonest one. The worst offenders were the big cutting companies and monopolists; but even they could not pay a 10-per-cent. dividend by selling Pears' soap at 3*d.* and Beecham's pills at 9*d.* Cutters were using proprietaries to induce the public to believe that chemists were extortionate swindlers. It had been found impossible for retailers to provide a remedy for this state of things by themselves alone. They must get the proprietors themselves to fix an irreducible minimum price, below which the article should not be sold. It was the interest of proprietors to have as large a number of distributors of their goods as possible. The people who pretend to distribute their goods for nothing are really the people who were doing them the most injury; because once they get the buyers of those goods into their shops they use every inducement—sometimes legitimate and sometimes not—to get the customer to take something on which the cutter himself made an excellent profit. The proprietors' best interest was to see that those who distributed his goods were fairly and adequately paid for so doing; and once they convinced the proprietors of that the difficulty would be solved. Having explained the system of the P.A.T.A., Mr. Glyn-Jones said one big cutter, who was the managing director of forty or fifty shops, maintained that he was not at all inconvenienced by the association, and that he could get all the goods he wanted; but the case of the Association was that in eight cases out of ten the prohibited goods were unobtainable. Companies with their forty or fifty shops dealing with other peoples' money were pushing out private traders. They would drop a certain amount of money until they succeeded in their object. There was one town in England in which seven years ago there were fourteen shops in the hands of private traders; now there were only four in the hands of private traders, the others being branches of huge companies. It was only by combination that they could fight this system.

Mr. Bernard moved, and Mr. Conyngham seconded, the following resolution:—

That this meeting of pharmaceutical chemists and druggists in Dublin expresses its cordial approval of the aims and objects of the Proprietary Articles Trade Association, and respectfully urges all proprietors to co-operate with the movement.

Mr. Wells, speaking in support of the motion, said Mr. Jones had referred to a gentleman who spent a great deal of his time in writing letters. He (Mr. Wells) had read those letters, and what he thought was that if the Association was not the success that it was stated to be, why was so much time wasted in writing those letters? He agreed with Mr. Jones that the chemists had been the best friends to proprietary articles. Round Dublin to-day they would see lots of chemists' shops, the counters of which were covered with bills and advertisements of those articles. He was offered a handsome rent for his window if he would lend it for a month, but he declined the offer. They had the matter in their own hands if they would combine.

Dr. McWalter, in supporting the resolution, said he was sorry it had been thought necessary to include grocers in the operations of the Association. A fixed profit of even 10 per cent. meant much to the grocer, whose receipts were large and expenses proportionately small, whilst it would not be remuneration to the chemist, whose turn-over was small.

Dr. Walsh thought that considering the difficulties the P.A.T.A. had had to encounter from the big stores—particularly on the other side—the strides it had made in a short time were simply marvellous. He warmly supported it.

Mr. T. J. Robinson argued that it was a weak point of the Association that it did not go in for the face-values, leaving it to the manufacturer to fix what the price and the profit were to be. He strongly urged the necessity of co-operation in the matter of prices among the pharmacists of Dublin. Without that, the Association could not help them much.

Mr. Glyn-Jones, in replying, referred to the question of "face"-value, and said it should be borne in mind that there had been the greatest difficulty in getting manufacturers to do what they had done for them, although the number of manufacturers on their side was increasing considerably. He had the strongest view that an article should be sold at the price marked on it, but they had in their Association some prominent chemists who had said that they would fight against any attempt to fix prices at the face-value. These maintained that they had cash-customers and booking-customers, and that it was not fair to charge the former the same prices as people who ran accounts for two and three years. They said, too, that the public had been so long used to buying those goods at something less than the price fixed that it would be a serious injury to their business to insist on full face price. It was remarkable that the Association had been able to do what it had done with between 2,000 and 2,500 members; he was glad to say that, during the last few months, the number had gone up to 3,000. He did not agree with Mr. Robinson that they had nothing to say as to the amount of profit they were to get. The time had come when they should say: "We consider such and such a profit the fair one, and we won't support your articles unless you give it to us." Every article should bear its proper ratio of profit. Articles likely to remain on the shelves for six months with the risk of damage should carry a higher profit than those that sold rapidly. But nothing less than 20 per cent. should satisfy them. As for Dr. McWalter's observations about the grocers, the question of arranging prices could not have been tackled without in some way considering them. There were 16,000 grocers in England with patent-medicine licences.

The resolution was ultimately carried unanimously, as was another, on the motion of Mr. Grindley, seconded by Mr. Conyngham, forming of the gentlemen present a committee, with Dr. Walsh as convener, to take the necessary steps to form a local organisation.

MEETING AT BELFAST.

A MEETING called to consider the P.A.T.A. scheme was held at Belfast on December 3. The meeting was under the auspices of the Ulster Pharmaceutical Association, and the Northern Branch of the Chemists' and Druggists' Society of

Ireland. Sir James Haslett, M.P., was voted to the chair, and there were also present Messrs. G. Pring (Secretary of Grattan & Co., Limited), George A. Webb, W. Jamison, J. Campbell, Jas. Brown, Jas. Gray, S. Suffern, Jas. Hogg, W. Martin, J. B. Robinson, W. J. Rankin, B. Cunningham, R. W. McKnight, R. R. Ritson, S. Gibson, J. H. Shaw, J. D. Corse, T. Campbell, S. Archeson, W. White, W. Moss, J. A. Stewart, F. Lindsay, J. N. Moffit, J. W. W. Agnew, W. Shaw, W. J. Gibson, S. McDowell, D. W. Elliot, J. Culler, and J. C. Payne, J.P.

The Chairman said the question of prices for proprietaries was an increasingly important one. Advertising created the demand, and between the proprietor and the consumer the distributor was being badly sandwiched to the advantage of neither. The profits accruing to wholesalers, as well as retailers, had worn exceedingly threadbare. The leverage necessary for improving those profits must be exercised by proprietors, but manufacturers must be influenced by retailers if they were to exercise that leverage.

Mr. Glyn-Jones then expounded the P.A.T.A. scheme, and pointed out that the Association was constantly increasing in numbers and influence, and that since he had left London a week or two ago meetings of the trade had been held at Chester, Derby and Scarborough, and that as a result, not only had the P.A.T.A. secured 90 per cent. of the chemists of those towns as members, but also that in each town a local Association had been started. The speaker strongly deprecated the practice of exhibiting advertisement matter referring to unprotected articles, and pointed out that in so doing the trade were only assisting to create sales for unremunerative articles.

The Chairman moved:—"That this meeting of the pharmaceutical chemists and chemists and druggists of Belfast expresses its cordial approval of the aims and objects of the P.A.T.A. and respectfully urges all proprietors to co-operate with the Association." Mr. Jamison seconded this, and instanced a number of proprietary articles whose sales had been injuriously affected by the opposition of the trade due to cutting. He felt sure that the Association, with the help of the manufacturers, could do a great deal of good, and he thought it deserved the heartiest support that the Belfast trade could give it.

Mr. Payne said he was convinced that no local effort or arrangement could improve prices, and that the only method to adopt was that of the P.A.T.A. The prices for dispensing had also been considerably reduced, and he attributed that in a great measure to the hold cutting firms were seeking to gain by cutting proprietaries. Apart from the question of profit he was sure they would all welcome a fixed irreducible price for proprietary articles.

Sir James Haslett said the best compliment that could be paid to the Association was the number of firms who had in their own way, by individual agreements, tried to fix prices. If such firms would work in conjunction with the P.A.T.A. unnecessary trouble and annoyance would be spared to all concerned.

Mr. James Hogg opposed the resolution. He objected to the Association allowing different prices to be charged for 13½d. articles: he thought there should be a uniform price. There were only a few important articles on the List, and the number of chemists who had joined was under 3,000. It appeared to him that Mr. Glyn-Jones had come to Ireland in the interest of a lot of unknown proprietors. He also believed in absolute freedom, and was of opinion that proprietors and retailers should do just that they liked with the articles.

Mr. Culler and Mr. Carse also spoke.

Mr. Hogg moved an amendment to the effect that the meeting decline to pledge itself until the opinions of those not present had been taken. He was unable, however, to find a seconder, and the resolution was carried with one dissentient (Mr. Hogg).

It was decided that a Special Committee should be formed consisting of those who became members of the P.A.T.A., and Messrs. Culler and Rankin were appointed by the meeting to act as Joint-Secretaries for that Committee.

Votes of thanks to Sir James Haslett and Mr. Glyn-Jones concluded the meeting.

MISS DECIA BAKER and Miss Ennis, two Cincinnati pharmacists, have gone to Klondike to open a pharmacy.

The Winter Session.

PHARMACEUTICAL SOCIETY.

TUESDAY evening's meeting at 17 Bloomsbury Square, W.C., was a small one, and no wonder, for the wind blew and the rain fell, so that it was difficult now and then to hear what the speakers were saying. Mr. Walter Hills (President) was in the chair; Messrs. C. B. Allen and W. Martindale were the only members of the Council who had ventured out; but the veteran, Mr. Thomas Greenish, was there, as well as his son, the Professor, and a few past, present, and future examiners. The principal attraction of the evening was a paper on

SOME OF THE OFFICIAL EXTRACTS.

By E. H. Farr, F.C.S., and R. Wright, F.C.S.

Mr. WRIGHT read it. In the introductory part of the paper the authors referred to the advantages of having the active properties of plants presented in small compass, and pointed out that that is not exactly the case with the green extracts, for the experience and knowledge which has accumulated since plant-juices and green extracts made from them were introduced into medicine have gone to show that in pressing the fresh plants more active principle is left in the marc than is found in the juice. The authors have shown that to be the case with conium, and Mr. J. C. Umney has stated that in pressing aconite scarcely any aconitine is found in the juice, but on extracting the marc practically the whole of the aconitine was obtained from it. One object of the present paper was to show that what is true of aconite is true of the other green extracts, and the authors proposed that a series of alcoholic extracts of the fresh plants should be introduced. They had deduced from their results in making standardised tinctures that active extracts could easily be obtained by evaporation of such tinctures.

Their experimental-work was practically confined to the extracts of aconite, belladonna, henbane, hemlock, and colchicum, but several samples of commercial extract of stramonium were examined, and two samples of alcoholic extract of the leaf were made for comparison with the official extract. An alcoholic extract of taraxacum root was also prepared with an 80-per-cent. menstruum. The chemistry of this root is in such an unsatisfactory condition that no assay of its preparations is at present possible. If, however, the bitterness of the extract affords any criterion of value, as is usually supposed, this should be an excellent preparation, seeing that it possesses at least ten times the bitterness of the official extract.

The methods of assaying the alkaloidal extracts were the same, substantially, as those described by the authors in a series of papers contributed by them to the British Pharmaceutical Conference, THE CHEMIST AND DRUGGIST and the *Pharmaceutical Journal*. The following are the results of the assays of commercial extracts:—

Ext. aconitæ.—Alkaloid, lowest 0·2 per cent., highest 0·66 per cent., average 0·43; moisture 19·5 to 29·4 per cent., average 24·2.

Ext. belladonnæ.—Alkaloid, lowest 0·52 per cent., highest 1·33 per cent., average 0·95; moisture 24·8 to 29·6 per cent., average 26·23.

Ext. conii.—Alkaloidal hydrochlorate, lowest 0·04 per cent., highest 0·7 per cent., average 0·4; moisture 21·6 to 29·5 per cent., average 25·8.

Ext. colchici.—Alkaloid, lowest 0·78 per cent., highest 1·6 per cent., average 1; moisture 19·0 to 30·9 per cent., average 24·2.

Ext. colchici acet.—Alkaloid, lowest 0·62 per cent., highest 1·12 per cent., average 0·93; moisture 22 to 36·3 per cent., average 26·6.

Ext. hyoscyami.—Alkaloids, lowest 0·13 per cent., highest 0·18 per cent., average 0·13; moisture 22·9 to 29·3 per cent., average 26·6.

In each case six samples were examined. The authors then submitted the results of their experiments with alcoholic extracts made by themselves from the dried drugs in suitable powder, using 70 per cent. alcohol as a menstruum (colchicum 50 per cent.) and percolating until three volumes of percolate represented one of drug. The percolates were evaporated over a water-bath. The temperature of the evaporating-liquid never exceeded 70° C. The results are given in the following table, which shows the average per-

centage of alkaloid, &c., in (1) juice-extracts, (2) in alcoholic extracts, with approximate average yield of the latter:—

Extract	Alkaloid	Moisture	Dry Extract	Yield Per Lb.
Aconite (1)	·43	24·4	75·6	—
(2) Leaf	·60	17·0	83·0	2½ oz.
(3) Root [... ..	2·44	20·8	79·2	4 "
Belladonna (1)	·98	26·2	73·8	—
(2)	2·86	20·2	79·8	4 "
Conium (1)*	·40	25·8	74·2	—
(2)	·30	17·7	82·3	2½ "
(3) Fruit	8·13	18·6	81·4	—
Colchicum (1)	1·01	24·2	75·8	—
(2) Corm	1·67	20·5	79·5	2¾ "
(3) Seed	3·16	18·2	81·8	2 "
Colchicum, acetie (1) ...	·93	26·6	73·4	—
(2) Corm	1·67	19·3	80·7	2¾ "
(3) Seed	2·93	17·7	82·3	3 "
Hyoscyamus (1)	·15	26·6	73·4	—
(2)	·30	18·0	82·0	4 "
Stramonium (1) Leaf ...	1·54	19·4	80·6	2 "
(2) Seed	2·73	16·8	83·2	—

The authors came to the conclusion that there can be no reasonable doubt as to the superiority of the alcoholic extracts over those at present in use. They compare very favourably with the official extracts, both as to appearance and aroma, and their superior strength is accompanied by a corresponding advantage—viz., a greatly reduced dose. This, in an age which might almost be characterised as an age of "little pills," is by no means the least of the advantages they present. As regards the keeping properties of the extracts the authors had not much evidence to offer, but there is no reason to suppose that in this respect they will fall behind the juice extracts.

The PRESIDENT said that the names of Farr and Wright were as well known in connection with practical pharmacy as those of Tate and Brady were in connection with hymnology. The subject of the paper was important, for it came forcibly before them in their daily work. That afternoon he had been looking over an old Dispensatory and found that there were only from seven to ten extracts in the earlier London Pharmacopœias, and they were nearly all prepared by the process of decoction. The 1885 British Pharmacopœia, which was now becoming obsolete, contained fifty extracts, so that the principle had been growing. He had looked into his own firm's business books, and found that there were about 300 liquid and solid extracts that they had to deal with in the business. He had a sentimental affection for the old green extracts. (Hear, hear.) It was rather refreshing to the Londoner in the month of May to see the fresh green preparations coming in, and he would be sorry if they were done away with. He had no doubt they were not definite, and did not represent fully the value of the drug, always assuming that the alkaloid was the right standard to take for the extracts. He fully expected that the alcoholic extracts suggested by the authors were a great advance upon those they had.

Mr. EDMUND WHITE said that the days of the green extracts were numbered, although they represented the old-fashioned idea, and he took it that the reason why they had become so popular with medical men was that in those days when they knew little of the active principles of the plants the juices seemed the safest thing to go upon. Probably the feeling that the activity of the plants was not due to one constituent but to many, or to some peculiar natural combination, had also favoured the growth of the esteem in which the preparations were held by medical men. He agreed that alcoholic extracts would be easier of standardisation, because they contained less extractive matter than the old ones.

Mr. E. M. HOLMES recalled the fact that a few years ago he had given Professor Dunstan some fresh aconite, drawn by himself, and the Professor told him that the juices contained little aconitine, as most of it was left in the marc after pressure. He therefore concluded that the extraction of the drug must be done with some suitable menstruum. What

* The alkaloids were weighed as hydrochlorates.

was the sugar extracted from the aconite root? What time of the year was the root collected?

Mr. W. MARTINDALE said the communication bristled with pharmacy, so that one was nonplussed to know where to begin discussion. Speaking of evaporation, he said that no doubt the temperature at which alcohol boiled was the best at which to evaporate an alcoholic extract. With weaker menstrua there was considerable difficulty in the latter part of the process on account of the large amount of water which had to be evaporated. He commented in succession on the utility of the water-bath, the steam-bath and vacuum evaporation, concluding that the longer heat is applied, the greater is the damage done to the active principles in the preparation. He quite agreed with the statement that one part of the drug could be extracted with three volumes of alcohol, and considered further extraction would be a mere waste of time and material. It was quite true that, in the old-fashioned way of making extracts, the resulting product was considerably loaded with extractive matter; but he was somewhat surprised to hear of sugar in the aconite extracts, and presumed that the root must have been collected in the autumn, when the starch becomes converted into sugar. It was generally assumed that the crystals in green extracts were potassium chloride, and he had found it to be so in some cases, such as conium. He agreed generally with the recommendation that the extracts should be made with alcohol, but deprecated following too closely the American method which had given them the eclectic remedies with the termination "in," which was generally reserved for alkaloids and glucosides. Pharmacists would part with extract of aconite without regret, as it was rarely prescribed, and was seldom in a fit state for blending with the other ingredients in prescriptions. He had always considered the acetic extract of colchicum a mistake, and the one suggested was much better.

Mr. C. B. ALLEN also spoke, but chiefly in a complimentary strain, and emphasised the necessity of doing something to stop the startling variations which were exhibited in commercial specimens of these potent remedies.

Professor GREENISH asked why so large an amount of alkaloid remained in the marc after pressure. Histologists had shown during the past few years that alkaloids are localised in plants near the epidermis, and it might be possible that, in the crushing, for one cell that discharged its contents a dozen might not; but could not this be overcome in some manner? They had every reason to believe that the alkaloids exist in the plant in solution.

Mr. WRIGHT then replied, stating that the introduction of green extracts into the Pharmacopœia was due to the late Mr. Peter Squire, who suggested the use of vegetable-juices at a time when no method of estimating the real value of the drug was known, and it was easy to understand why pharmacists and physicians, deceived by the odour and appearance of the juices, should consider that they fairly represented the physiological activity of the plant. He would not like to venture an opinion why the juices were not fully active, but pointed out that the amount of juices obtained varied with the dampness and moistness of the plants, and that the juices were not extracted from the leaves alone, but from the leaves and flowering tops. He recalled what he and Mr. Farr had found in the case of conium. Replying to Professor Greenish, he said that it was a question whether the alkaloids were always in solution in the living plant. For example, aconitine was mostly in a free state in the plant, so that it was likely that only that portion of it which was in combination with the vegetable-acids would be in solution. However, this whole question was one for histologists to tackle. The sugar was not pure cane-sugar. The temperature at which they had evaporated most extracts was from 160° to 165° F. The danger in regard to the alcoholic extracts was that if they were not properly evaporated they were very hygroscopic; and the same obtained with acetic extracts. The crystals in extracts of conium were ammonium chloride. As to the great variation of the strength of the extracts the whole thing resolved itself into a question of standardisation. He was afraid that that principle did not find favour in certain quarters, and it was a matter, he was told, for the next century, although he thought from the way in which it was received that it would be the century after that before anything were done. (Laughter.) He contended, however, that the only logical

outcome of investigations such as those which he and Mr. Farr had been engaged on was standardisation. They as pharmacists had nothing whatever to do with physiological activity; their duty as pharmacists was to see that, so far as their knowledge went, the articles which they sent out were not inert, and some of these extracts which they had obtained in commerce were. Therefore, he said that standardisation should be carried up to the limits of our knowledge of the chemistry of the drug. (Applause.)

Mr. FARR also replied, stating that the sugar which he had extracted reduced Fehling's solution in part, and the other part of the sugar only reduced the copper after inversion. In "Pharmacographia" it was stated that there was another body which refused Fehling's solution, but they had not discovered it.

Mr. E. M. HOLMES, F.L.S., the curator of the museums, then called attention to

SOME RECENT DONATIONS,

confining his remarks to cayenne pepper, ayapana, and mescal buttons. Recently Japanese chillies have come into the market, and, owing to their attractive appearance, bright red colour, and similarity in size to the official capsicum, they have fetched good prices. Mr. J. C. Umney has examined them, and has found that they are greatly deficient in pungency. He sent samples of them and of alcoholic tinctures made from the Japanese and other varieties. It was seen that on diluting these with 14 volumes of water per volume of tincture, the most pungent variety gives the cloudiest mixture. The Japanese fruit of is rich in fat and poor in resins. Natal chillies, Mr. Holmes pointed out, are much more pungent than the Japanese, and they are brighter in colour also. They are the fruit of a *Capsicum annuum*. This kind is imported in powder. Chillies from Sierra Leone are dull in colour, but are always pungent—are, indeed, the most pungent in the market. The next specimen to which he called attention was ayapana, the dried tea-like leaves of *Eupatorium ayapana*, a Brazilian plant. Ayapana is an old remedy revived. It is used as a tisane in South America, in the West Indies, and other parts of the world as a panacea for stomachic and bowel complaints. It has a diaphoretic action, stimulating properties, &c. In fact, the account which Mr. Holmes gave of it was somewhat glowing; but ayapana has been tried in civilised medicine before, and fell into disuse. It is to be tried again, however, and pushed as a popular remedy. Mr. D. Hooper states that ayapana contains an essential oil and a bitter principle—ayapanin. Mr. Holmes also showed living specimens grown by himself of *Anhalonium Levinii* (mescal buttons), the remarkable properties of which were described in the *C. & D.*, October 5, 1895, and April 10, 1897.

THE PRESIDENT, in opening the discussion, emphasised Mr. Holmes's suggestion that pharmacists should use their senses in determining the value of cayenne, and, in reference to ayapana, said it was one of those panaceas which, if used as tea to cure all ailments, would not leave much for the pharmacist to do. (Laughter.) Mescal buttons seemed to be somewhat similar in action to Indian hemp.

Mr. WHITE confirmed Mr. Holmes's observations on the curious effects of mescal buttons. Indeed, the person who takes it, said he, has to be tied up. (Laughter.) Mr. Braithwaite was now engaged upon the chemistry of the drug, and had isolated some interesting substances, with which experiments had been made upon cats, whose behaviour under the influence of the drug was remarkable. (Laughter.) The particulars regarding these observations would be published soon.

Mr. PETER MACEWAN, referring to the remarks on cayenne, said the whole subject deserved better attention, as there was a large variety of capsicums coming into the market, about which they knew little; and it was desirable that investigation by a pharmacognist and chemist should be instituted, in order to determine the origin of each variety of the fruit, and the relative value of the kinds. Druggists in several parts of the country sold large quantities of an absolutely tasteless capsicum, which was added to the food of birds, in order to brighten their plumage. The origin of this capsicum was somewhat of a mystery, and the trade was in the hands of a comparatively few houses. Many years ago the late Dr. Bowman Brady, on re-

turning from a trip round the world, obtained a tasteless capsicum in Hungary, which was supposed to be the kind used for bird-feeding, but that capsicum had a certain amount of pungency, whereas the birds' kind had none, and was of a bright colour and fatty nature. Perhaps Mr. Holmes would be able to throw some light on the origin of that kind.

Mr. WRIGHT, as an old apprentice of Dr. Thresh, whose researches on capsicum had been referred to by the previous speaker, said that the research had a very curious effect upon apprentices. (Laughter.)

Mr. BOWEN asked if the active principle of ayapana was theine.

Mr. MARTINDALE said that we were quite in a fog as to the origin of capsicums, and the whole subject, especially in regard to the geographical distribution of the plant yielding the official variety, deserved investigation. While the public wanted bright cayenne he had always been suspicious of that kind for pharmaceutical purposes, and preferred a powder with a dull yellow colour.

Mr. HOLMES, replying, said that the pepper used for birds had been determined by Mr. Greenish many years ago to be "paprika." It was imported from Hungary and Spain, and the late Professor Archer told him that it was the fruit of *Capsicum tetragynum*. It was rich in colour, and he thought there was no difficulty in getting it. There was an enormous number of varieties of *Capsicum annuum*, especially in Central America. Nearly all the pungent chillies came from America, and were of all sorts of shapes. He did not think geographical position had much to do with it, though they could always depend on the Sierra Leone kind being hot; also that from Zanzibar, which, however, was badly harvested.

The meeting then closed. The next one will be held on Tuesday, February 8, and in announcing that fact the President wished the members "A merry Christmas and a happy New Year."

CHEMICAL SOCIETY.

THE meeting on Thursday evening of last week was in several respects exceptional. First, it was a record for brevity (lasting scarcely an hour); second, two papers were communicated, and everyone wondered what had become of the unannounced third, for which a whole blackboard had been filled with hieroglyphics; third, the PRESIDENT made several vain attempts to get someone (perhaps the author of the third paper) to make an extempore communication to the Society; and fourth, Professor DEWAR adjourned the meeting before 9 and got Mr. HORACE BROWN, F.R.S., to tell the Fellows of the Society about his new discovery regarding the vitality of seeds, which was "could kail het again," as the Royal Society had heard it all before. There was also

A BALLOT,

which was really the secret of the large attendance, for on a night of that kind an unofficial whip is sent round by what is known as the Blackballing Committee. Who constitute that committee, where it meets, and what are its precise objects, nobody seems to know. Some say that it is merely a wing of the Society of Public Analysts, a conjecture which is based upon the fact that the analytical red-rags are surgeon-chemists and drug-chemists, not to mention school-masters, "authors" and "cemetery keepers" all of whom figure now and then on the committee's mysterious documents. An appearance of verity is given to the conjecture by the circumstance that on ballot nights the marshal of the malcontents is a certain stout gentleman from Chelsea way, who looks, and is for the nonce, the most important person in Burlington House. The document which the Star Chamber judges had issued for last week's meeting indicated a prosperous growth, as it was printed on a quarto sheet of good paper—a great advance upon the scrappy things formerly issued. It read as follows:—

Private.

C. S. BALLOT.
Thursday, 2nd December 1897,
8 to 8.30 P.M.

Your attendance is earnestly requested by the Ballot Committee.

You have no doubt observed that the claims of several appli-

cants require to be carefully weighed. The following names are mentioned in order that they may receive your careful consideration.

Then followed four names, "to publish which is felony," or something next door to it, as the "Ballot Committee" doubtless know. On this occasion the names were taken from medicine, pharmacy, and the tea-trade, and when the election-list was read out they were found to be absent, so that black-balls had prevailed. The Fellows had also presumed to act in the same way to others without assistance from the committee. Amongst the elected were Mr. M. E. Stephens, writing-ink manufacturer, and Mr. J. S. Turner, formerly an assistant in the Pharmaceutical Society's laboratories.

THE PAPERS

communicated were one by Dr. Mathews, in which he found substantiation of Professor Collie's new space formula for benzene in the hexahalogen derivatives of that body, and the other was about compounds of piperidine with phenols, the authors of which, in an attempt to prove a formula for camphor (in which they failed), stumbled upon crystalline compounds of piperidine, with pyrogallol, pyrocatechol, hydroquinone, guaiacol, and vanillin, some of which give indications of yielding colours.

THE AFTER-MEETING,

at which Mr. BROWN spoke, was really interesting. The point of his remarks is this: The protoplasts in seeds have long been a mystery to some biologists, for they seem to be a defiance to the axiom that protoplasm is always undergoing chemical change. Romanes kept seeds for eighteen months in sealed tubes partly and wholly vacuated, and could find no evidence that they had absorbed any gas, or given off any. Another investigator did the same thing in Geissler tubes, and, after many months, could not find the slightest trace of a carbon-dioxide spectrum, which should have been there if the protoplasts were behaving as the protoplasm of polite society does. The question, therefore, arises, Is the protoplasm of seeds alive, dead, or in a special condition? To answer that Mr. Brown gave Professor Dewar eight or nine kinds of seeds, and asked him to expose them to the temperature of liquid oxygen (-182°C). So the Professor put the seeds in sealed tubes and kept the tubes for 110 hours in liquid oxygen, using up about a dozen litres of the liquid for the experiment. Since chemical action cannot exist at -182°C , as far as we know, if there is any chemical action in seeds, if the protoplasm in them is alive, the prolonged bath of liquid oxygen should put a stop to it. The seeds were slowly thawed, then subjected to the germination process along with reserve samples of the same seeds which had not had the bath, and, behold! those that were chilled germinated as well as those which had not been. Thus, the seeds survived a temperature at which there is neither chemical action nor life, and, said Mr. Brown, they may be immortal. We do not feel at liberty to report the conversation which followed Mr. Brown's remarks, but we may say generally that it took a philosophic turn. Biologists are at their wits' end to account for Mr. Brown's result. It upsets all theories regarding protoplasmic life. We get back to the old-time notion in respect to seed-growth; it is a veritable resurrection, a raising of the living from that in which there is no life—we cannot say that seeds are dead. What is their condition? That is what puzzles the biologists and all others. We have no word for it. A Scotch biologist of a poetical turn has put the biological view in these passages:—

Autumn fruits . . . crown the plant's work for the year, and form the cradles of next year's seedlings; they protect the young lives within the seeds, and also secure their dispersal.

In a world where all is so wonderful, "so full of death, so bordering upon Heaven," is there anything so wonderful as this meeting of life and death, as this raising of what we call dead into what we call living, as this power that plants have to win the sun's aid that they may by secret alchemy transmute water, soil, and air into the rich wine of life?

The riddle of life proved too much for the Fellows of the Chemical Society (the carbon atom's position in space is enough for them), so they took refuge in coffee and cake. Wise men!

SOCIETY OF CHEMICAL INDUSTRY.

MANCHESTER SECTION.

At the meeting held last week, after a discussion on oxygen-absorption by sewage effluents, Dr. GROSSMANN read a paper on

TESTING INDIGO

with permanganate of potash. He gave a categorical criticism of the method with which the name of Mr. Chr. Rawson was always associated, though he admitted that it seemed to have been fathered upon him to a certain extent. He justified his own advocacy of the permanganate-test when used in conjunction with the dyeing-test he had described before the Society of Dyers and Colourists at Bradford last year. There was a brief discussion, in which Dr. GERLAND and Dr. GREEN took part, the latter reviewing the summary of indigo-tests made by Wroblinsky in the *Moniteur Scientifique* recently, in which he recommends the Engler test.

THE CHOICE OF POWER IN CHEMICAL INDUSTRIES.

Dr. BOWMAN then read a paper on "Steam, Gas, and Electricity in Chemical-works." His facts were based on practical trials of five years' duration as opposed to special tests of engine, &c., efficiency. His practical experience had taught him that the steam-engine was a very wasteful machine, but it had so many advantages that, except under special conditions, he feared that for a long time to come they would have to rely on it in chemical-works. For every 100 tons of coal used in raising steam 85 were practically wasted, as far as work done is concerned, and this apart from the loss of steam by condensation. The gas-engine was too complicated and intricate for the rough work of a chemical-factory, but where power was required for the production of an electric current, and there was a supply of producer-gas available, there was no doubt the gas-engine was most efficient and economical. Owing to its great cost and other objections, he thought that in an ordinary chemical-works electrical energy for some time to come would be confined to lighting. He dispelled the idea that water-power was so cheap as to give undue advantage to those possessing it, for although it had many advantages generally it was only attainable at the expense of many other facilities.

NEWCASTLE-ON-TYNE AND DISTRICT CHEMISTS ASSOCIATION.

At a meeting of this Association, held on December 1, Mr. T. Maltby Clague (President) in the chair, Mr. F. C. LONG, pharmaceutical chemist, opened a discussion on "The Proposed Amendments to the Pharmacy Act." Mr. Long sketched in some detail the history of the Pharmaceutical Society, and deduced from his narrative the desirability of the Society being supported by the unanimous voice of the trade. He was not sure that the means proposed will bring the rank and file crowding into membership, but until it is at least possible for every fully-qualified person in the trade to become a member, the Society will never be able to do what it might in the interests either of the trade or of the public, by legislation or otherwise. In order to keep an honorary distinction between the ordinary members and those who pass the Major examination, and to hold out some inducement for entering upon the higher course of study, it had been suggested, he observed, that the Major qualification should confer the title of "Fellow of the Society," or some such distinctive title. He did not approve of the suggestion to make students "associates" of the Society. He also desired that it should be obligatory that the Preliminary examination should be passed before apprenticeship commenced.

Mr. JOHN GIBSON, jun. (Hexham), held that the Minor man ought to have the right to style himself a pharmacist, and his shop a pharmacy, seeing that the higher qualification did not include any further examination in pharmacy or dispensing.

Mr. F. R. DUDDERIDGE was inclined to oppose the admission of Minor men to full membership, but would like to see them have a greater voice in the management of the Society, and to have exemption from jury service.

Mr. GEORGE FOGGAN (Bedlington) considered that all

registered chemists should be admitted to membership, as it would tend to consolidate the Society.

The PRESIDENT said it would be hopeless to attempt to get the Juries Act altered, and, that being so, the only means of getting exemption from jury service for Minor men was by giving them the title of pharmaceutical chemists. The ground covered by the present-day Minor examination he considered was sufficiently wide to warrant this.

Mr. KERSE said if any change on suggested lines was made, it would have to include those who were registered previous to December 31, 1868, and also those who had since passed the modified examination.

Mr. LONG, having replied to several points raised during the discussion, then submitted the following resolution:—"That the examination in lieu of the Preliminary, approved by the Council, be passed before commencement of apprenticeship."

Mr. GRAHAM said it was almost impossible to get boys able to pass Preliminary when they left school. They, as a rule, had no Latin. He thought that so long as they took the examination three years previous to entry for the Minor it would be sufficient. He was supported by Mr. GIBSON, but Mr. ELLIS (South Shields) and Mr. BUCKLEY (North Shields) supported Mr. Long's motion. Mr. MERSON thought that in the interests of the boys themselves, passing the Preliminary before entering upon their apprenticeship should be compulsory. He was of opinion that when the new Preliminary came into force it would be absolutely necessary for youths who intended to enter the drug-trade to go through a systematic course of study at an organised school, and that fact alone would render it advisable to pass previous to apprenticeship. The resolution was carried with only two dissentients.

Resolution 2, submitted by Mr. LONG, was:—"That it is inadvisable to admit students of the Society to the title of Associates." Carried unanimously.

Resolution 3—"That registered pharmaceutical students, on passing the Minor or qualifying examination, be entitled to assume the title of pharmaceutical chemist and be eligible for election as members of the Society"—was also carried unanimously.

Resolution 4—"That of the titles suggested as a distinction for members of the Society who pass the Major examination, that of Fellow of the Pharmaceutical Society best meets the requirements of the case"—was carried unanimously.

Mr. DUDDERIDGE moved "That Resolution 1, in the event of becoming law, should be suspended for three years, to allow those already in the trade exemption." Carried.

Mr. KERSE brought forward the subject of explosives regulations, and referred to the difficulty wholesale firms had in executing orders for small quantities of picric acid when wanted for medical purposes. He suggested that the matter be discussed at a future meeting and a resolution forwarded to the Pharmaceutical Society, with a view to getting some alteration on behalf of *bona-fide* dealers in drugs.

THE NORTH STAFFORDSHIRE CHEMISTS' ASSOCIATION.

A MEETING of this Association was held at the Copeland Arms Hotel on December 2, Alderman J. Averill (Stafford) presiding. There were also present Messrs. F. Adams, W. Allison and N. G. Emery (Stoke), Ed. Jones, T. C. Cornwell, J. W. Moore, R. T. Christopher, J. W. Furnival, J. H. Waldron, and W. Elmitt (Hanley), Weston Poole, C. J. Wade, and E. H. Croydon (Newcastle), R. Prince and G. Fisher (Longton), F. R. Wrench (Silverdale), E. Hemmingway and J. H. Jenkins (Stone), F. W. Goodman (Eccleshall), J. Hartley (Leek), W. Hankinson (Uttoxeter), W. Brissom (Liverpool). Mr. Weston Poole read a paper on the advantage of all chemists joining the Pharmaceutical Society and the local association. The great aim, he said, of the Pharmaceutical Society was in 1842, as at the present time, education, with the object of getting the practice of pharmacy restricted to its own members. This ideal had not yet been attained, but their educational efforts had borne fruit in many other beneficial ways. The Society was now doing all it could to prevent unqualified men assuming the title of chemist. He lamented the facts that limited-liability companies were able to evade the spirit of the

Pharmacy Act, but he did not think the Pharmaceutical Council was to blame for this state of things as much as the chemists and druggists themselves. They had not supported the Council so strongly as they should have done. After referring to the benevolent and orphan funds, which he said were administered in a catholic spirit, the speaker said he did not hold the Pharmaceutical Society to be a panacea for all their ills, or that by joining the Society a Utopian condition would be brought about, but the first step towards improvement was for each chemist to join the Society. Local associations, he went on to argue, should deal with those commercial matters which, if settled by the Pharmaceutical Society, would lead the general public to the opinion that the Society was merely a trade union, instead of a kind of Government department, whose duty it was to see that the Pharmacy Act was carried out.

After a vote of thanks had been passed to Mr. Poole, Mr. EDMUND JONES moved the following resolutions—

That this Association regrets the apparent apathy of so many chemists and druggists towards the Pharmaceutical Society, which was founded and exists for the benefit of the trade, and suggests as the best means of increasing, popularising, and consolidating the Society:—

- (1) That the Society should admit all chemists and druggists to the rights and privileges of membership and entitle them to assume the title of pharmacist or pharmaceutical chemist and so make them eligible for election as members of the Pharmaceutical Council on payment of an annual fee of 21s.
- (2) That the present "Minor" be divided into two parts, the first to be called the Intermediate and the second the Final, the Qualifying to be divided between these two examinations.
- (3) That there shall be an interval of not less than three years between the passing of the Preliminary or registration as students and the Intermediate, and one year at least between the Intermediate and, entries for the Final not to be admitted under the age of 21 years.

The various clauses were discussed *seriatim*. They were seconded by the PRESIDENT.

In the first clause Mr. T. C. CORNWELL moved and Mr. POOLE seconded an amendment that the words "and entitle them to assume the title of pharmacist or pharmaceutical chemist" be eliminated. They both contended that it would be unfair for Major men who had worked hard for those titles to have the significance of them nullified by all sorts of men being allowed to assume them.

Messrs. MOORE and WAIN, speaking as Minor men, supported the amendment.

Mr. JONES expressed himself as willing to accept the amendment, while he did not regret having moved the resolution in its original form.

The clause, as amended, was carried.

In moving the second clause, Mr. E. JONES said he believed the dividing of the Minor examination would make it easier both from a financial and educational point of view.

The CHAIRMAN, in seconding, said the Medical Council had adopted the system with most satisfactory results.

After some discussion, the clause was carried, four voting against.

Mr. WESTON POOLE moved that the third clause be amended by affixing the words—"That it is desirable that youths should pass their Preliminary examination or its equivalent, before commencing apprenticeship." He thought that such a system would do away with much of the present evil which came through ignorant boys being taken into apprenticeship without any hope of becoming qualified. Ultimately they became cheap-drug vendors.

Mr. CORNWELL seconded the amendment, and in that form it was carried.

On the proposition of Mr. FRANK ADAMS (Vice-President), who at this stage took the Chair, owing to the necessary retirement of the President, it was decided to forward to Mr. Walter Hills (President of the Pharmaceutical Society) the congratulations of the Association upon his being made the recipient of a Jubilee medal from her Majesty.

Mr. ED. JONES, in seconding, said he had had the privilege of serving under Mr. Hills as an assistant, and he could speak of the high qualities which had won him the presidency of the Pharmaceutical Society, and the honour referred to.

Mr. JONES, on behalf of Mr. Averill, moved—

That that Association request the Pharmaceutical Society to formulate a Pharmacy Bill to be presented to Parliament, and submit the same to a conference of delegates of each association, or, where no association existed, district, for their consolidation and approval, so that the Bill, when presented to Parliament, might have the support of the trade in general.

This was seconded by Mr. WESTON POOLE and carried unanimously.

SOUTHAMPTON AND DISTRICT CHEMISTS' ASSOCIATION.

A MEETING of this Association was held on December 2. After discussion the rules of the Plymouth Association (with a few alterations and omissions) were adopted. The first general meeting is to be called in January. The following officers were elected for the ensuing twelve months:—President, Mr. H. Wilson (Randall & Sons); Vice-president, Mr. Harry Johns; Committee, Mr. Walter (Derby Road), Mr. Pell (Woolston), Mr. Johnson (Portsmouth), Mr. Hughes (The Docks), Mr. Hodges (Six Dials); Hon. Treasurer, Mr. W. Bates; Hon. Sec., Mr. George H. Bishop.

BRADFORD CHEMISTS' ASSOCIATION.

At a Council meeting, held on December 7, it was unanimously resolved to join the Federation of Local Pharmaceutical Associations.

CAMBRIDGE PHARMACEUTICAL ASSOCIATION.

A MEETING was held at the Prince of Wales Hotel on December 3, Mr. Alderman Deck in the chair. In the course of a presidential address, he remarked on the advantages of such an association as theirs. It was decided to postpone the debate on the proposal brought forward by Mr. C. S. Addison, owing to the too recent publication of the Pharmacy Bill.

A CHEMISTS' ASSOCIATION FOR MONMOUTH-SHIRE.

AN association, designated the Newport and Monmouthshire Chemists' Association, with Mr. J. P. Garrett as President, Mr. C. Paine as Vice-President, and Mr. Benson Harries as Hon. Secretary and Treasurer, has been organised. A meeting has just been held (Mr. C. Paine, Vice-President, in the chair) to draft rules. The annual subscription is to be 5s. for members and 2s. 6d. for associates.

ABERDEEN JUNIOR CHEMISTS' ASSOCIATION.

At the meeting held on December 3, Mr. Wallace (President) in the chair, a lecture on "Solutions" was given by Mr. F. G. Hamby, F.I.C., chemistry lecturer at Gordon's College.

ABERDEEN AND NORTH OF SCOTLAND SOCIETY OF CHEMISTS AND DRUGGISTS.

At a meeting held on December 7, Mr. John Johnston (President) in the chair,

THE DRAFT PHARMACY BILL

was considered. Mr. WEIR initiated the discussion, and thought the admission of associates to membership a step in the right direction. Mr. JOHNSTON said it was desirable to have a non-contentious Bill, seeing there were so many associates unconnected with the Society, and added that, at the proper time, this Society should urge on the members of Parliament for the city and county to attend and vote for the Bill.

Mr. J. CRUICKSHANK submitted the following resolution:—

That the Aberdeen and North of Scotland Society of Chemists and Druggists supports the action of the Pharmaceutical Council in drafting the new Pharmacy Acts Amendment Act, and trusts it will open up the way to further legislation.

Mr. REID seconded, and it was unanimously agreed to. Mr. WEIR proposed—

That the Council further consider the question of territorial representation.

Mr. CRAIG seconded. Mr. REID moved a direct negative. Mr. URQUHART seconded, and this was carried by a large majority. Most of the members present expressed themselves in favour of territorial representation, along with other reforms, but thought it better not to encumber the present Bill with these.

Socialities.

THE WESTMINSTER COLLEGE (MESSRS. WILLS AND WOOTTON).

THE annual dinner of the Westminster College of Pharmacy was held in the Venetian Saloon of the Holborn Restaurant on Friday evening, December 3. Mr. T. Skewes Cox, M.P., presided, and a company numbering nearer two hundred than one hundred, with a large percentage of ladies, filled the hall. The entertainment following the dinner included a number of songs and recitations, which the company seemed to heartily appreciate. Miss M. Wills contributed two pianoforte solos, Mr. E. Reed and Mr. A. Burgin gave humorous songs, Mr. A. Greve was an effective tenor, and Mr. J. Tammadge proved himself an able reciter.

The report of the twenty-fifth session of the College was read by Mr. Waldon, the Secretary. It was stated that during the session 180 students entered the College, 34 of whom did not present themselves for examination; but 108, including 5 ladies, passed the various pharmaceutical and medical examinations which they attempted. One of their students was Mr. W. A. Knight, who had taken the highest pharmaceutical honour of the year—the Pereira medal.

The toast of "The Westminster College" was proposed by Mr. J. B. Davidson, of Fairfield, near Manchester, who narrated, with some humour, his career during the sixteen years since he had qualified therefrom. The point of his story was that wherever he went he found Westminster men holding responsible positions.

Mr. G. S. V. Wills, in responding, gave more instances of the ubiquity of his past students. His records for the past year showed that 6 Westminster students had died, 25 had gone into business for themselves, 2 previously in business had become bankrupt, and 17 samples of wedding-cake had been received from old students during the year. He read congratulatory letters from Mr. Kinsey Jones, Mayor of Llanidloes, and from Messrs. Copley and Smart, of Bulawayo, all of whom had passed through the College. Another, he mentioned, had commenced business in Mauritius, two in Australia, one in India, and two were going to Klondike in February next. The year had been an exceptionally good one with the College, as the report showed, and the grand total of entries since its foundation in 1872 now reached 3,457 students. The achievement of Mr. Knight in winning the Pereira medal, so decisively beating all other competitors that neither the second nor third prizes were awarded, was dwelt upon, and it was stated that in only one other instance had that medal ever fallen to a student of another school than that of Bloomsbury Square. Mr. Wills also dwelt at some length on the increasing proportion of failures at the examinations, and on the higher examination-fee which would be enforced in 1900. The idea, he understood, was to get a better class of students into the profession; but he appealed to the ladies present whether they would be likely to get a finer lot of young men than were present that night.

Mr. Wootton, B.Sc., later on proposed the toast of "The Students," laying down in a few pithy sentences their duties towards their teachers and their teachers' duties towards them.

Mr. E. G. Price responded, giving a sketch of the course of life at Westminster College, and, in response to the Chairman's invitation,

Mr. Knight, the Pereira medallist, added a few pleasant words.

The Chairman lastly presented eleven silver medals, prefacing this function by a humorous speech, in which he

narrated the difficulties he had experienced in acquainting himself with the subjects which he thought he ought to understand to fill his position that evening.

The following were the silver medallists:—

1. Mr. W. A. Knight, organic chemistry.
3. Mr. J. R. Evans, chemistry and physics, botany, materia medica.
2. Mr. W. J. Allen, botany, dispensing.
1. Mr. W. F. Young, chemistry and physics.
1. Mr. F. J. Osborne, dispensing.
1. Mr. H. Crookham, pharmacy.
1. Mr. G. W. Green, materia medica.
1. Mr. H. B. Clark, pharmacy.

THE MUSICAL MIDLANDERS.

The Midland Chemists' Assistants' Association held a smoking-concert at the Exchange Restaurant on December 1. Mr. William Jones, President of the P.A.T.A., occupied the chair. Songs, &c., were contributed by Messrs. Lidbury, Woolman, Thomas, Stan Leigh, Taylor, Cornish, Sadler, &c., and there was a large attendance.

"ALLENBURY'S" C.C. CONCERT.

The second annual ballad-concert of this club was held on Saturday, December 4, at the Bishopsgate Institute, when some hundred employes and friends listened to a high-class entertainment under the direction of the Hon. Secretary and stewards. Among the artists who contributed to the musical programme were Messrs. Hinchliff, Sadleur Brown, Misses McFarlane, Riversdale, &c. The humorous element was supplied by Messrs. Herbert Burney and Wilson James, the latter delighting his audience with "Tut-Tut," now "all the rage" at smokers. Messrs. F. J. Hanbury, W. Ralph Dodd (managing directors), and several heads of departments were present.

THE ASSISTANTS' DANCE.

The annual *conversazione* of the Chemists' Assistants' Association took place at the Portman Rooms on Thursday last, and there was a large and enthusiastic company, which included the President of the Pharmaceutical Society. As is usual at these gatherings, there was a marked excess of dancers over *danseuses*, but none of the ladies were heard to complain thereof; indeed, few of them had any time to do so, as they were all kept busily employed circulating round Messrs. T. C. W. and C. W. Martin, the indispensable M.C's. The speech-making after supper was brief, but humorous and to the point; and, when the ladies had had their fill of honeyed words, they resumed possession of the floor, of which they retained command till the early hours of Friday morning.

BRIGHTON SMOKER.

Mr. W. W. Savage took the chair at a social meeting of the Brighton Junior Association of Pharmacy held on Wednesday, December 1.

ESSENTIAL CRICKET.

Messrs. Stevenson & Howell's Cricket Club held their first annual dinner and concert on November 27, at the Fox Hotel, Southwark Bridge Road. Mr. H. C. Clements was in the chair, and, in proposing "The Club," remarked that the rapid growth of the firm had enabled the club to be formed and carried on with success for two seasons. The toast of "The Firm" was given by Mr. A. J. Croxford and responded to by Mr. C. A. Wrench. Two bats, given by the club for the best batting and bowling averages, were presented by the Chairman to the winners, Mr. C. A. Wrench and Mr. G. H. Dixon respectively. A capital musical programme followed the dinner.

On Wednesday a party of students from the Imperial College of Pharmacy, under the direction of the Principal, Mr. Frederick Davis, B.Sc., spent a pleasant and profitable afternoon at the Geological Museum, Jernyn Street. Mr. Davis described the various objects of interest in an able manner.

AN AMERICAN REASON.—Druggist: "I think we ought to sell bicycles." Clerk: "Why?" Druggist: "Nearly all the doctors prescribe them."

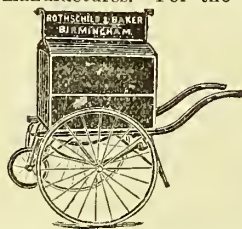
Our Town Traveller.

AN EXPERIMENT IN SHOP-FITTING.

ABOUT this time last year I told how "furnishing throughout" had come into the drug-trade through an advertisement by Mr. Philip Josephs, 54 and 68 Old Street, E.C., in the *C. & D. DIARY*. It was an experiment, now a success. This year two pages (36 and 37) in the *DIARY* are devoted to the idea, but then there are now two Philip Josephs—father and son—and the young idea is teaching the old how to shoot. It is surprising how many chemists adopt the plan of paying a stated sum for everything—45*l.*, 55*l.*, 70*l.*, 80*l.*, and 100*l.* are Messrs. P. Joseph & Son's prices for the chemist's-shop, *minus* the stock. A few weeks ago I saw a man hundreds of miles from London negotiating for some fixtures in his own locality, and he finished up by getting a new set from Old Street. "You make it extremely difficult for us to get assistants," said a provincial pharmacist to Mr. Josephs, sen., the other day, "by making it too easy for them starting in business." Mr. Josephs repeats the remark with pride. He showed me some bargains in individual parts of shop-fittings, such as three plate-glass polished-edge glass shelves with movable uprights (50*s.*), bargains in French scales, brass weights for them (1 lb. to $\frac{1}{4}$ oz.)—3*s.* 6*d.* a set—and dispensing-counters, which he has sold by the yard to several big drug-firms. These counters go to all parts of the world—Port Elizabeth and Madras are two of the latest additions to the day-book amongst foreign parts—but see what pages 36 and 37 in the *DIARY* say.

CHEMISTS' CARTS.

The title of this paragraph arises from a visit which I paid on Tuesday to the Holborn Viaduct Hotel, where, in room No. 19, second floor, Messrs. Rothschild & Baker, of Summer Row, Birmingham, are exhibiting some of their manufactures. For the moment I was bewildered by the



pretty things in mail-carts which are displayed in the rooms (No. 19 gives entrance to two), and Mrs. Chemist would quickly find how poor a carriage her baby has if she had a few minutes at R. & B.'s show. The mail-carts give point to the qualities of R. & B.'s chemists' carts and trucks, because light bicycle wheels and frames are the first essential of them—light, but strong. The carts are nicely balanced to reduce weight. A sample 6*l.* cart which I took hold of was so well hung that opening the door at the back weighed it down. Hence they are easy running, and they are really strongly built. The "Acme" truck is much larger (14*l.*), and it takes, in two racks below the enclosed van, two dozen syphons, besides a big load in the van. Metropolitan chemists who have the chance of running down to the Viaduct on Friday of this week can get in a few minutes more particulars about the carts than can be given in a long paragraph, and they can judge how effectively they can be used as an advertisement.

TUBED SPECIALITIES, &c.

The name of Marshalls (Limited) is usually associated with fly-catchers, but it was not with the object of seeing these that I went to Red Lion Square the other day, as it is now the close season for the *Musca domestica* at home. Mr. Marshall, however, has been turning his attention of late to the Cape and other colonial markets. In tubed specialities (with which most chemists are familiar), boot-blackening in $\frac{1}{2}$ -lb tubes is the latest idea. In this department the company are now giving away with all assorted orders of one gross a wire counter-stand, holding seven tubes filled with various preparations, such as tooth-paste, shaving-cream, glycerine-jelly, &c. In cheap perfumery the sixpenny "Monster" is a new arrival. The bottles hold 6 dr., are fitted with sprinkler top, the labels being printed in various art shades with gold lettering. The company have introduced a rubber tooth-brush, in which the handle is dispensed with. The brush is made to fit the finger, and

readily lends itself for cleaning the back of the teeth, for which purpose it has been designed. It is known as the "Simplex." Messrs. Marshalls have also built up a business in packed goods, and as prices are right and the articles nicely got-up they are well satisfied with this venture. One of the cheapest of the series is a line of baking-powder. Other household requisites, all retailing at 1*d.*, are put up in the same way. "Poppyland" is the appropriate name given to a new form of sachet, outwardly resembling the natural capsule of the poppy even to colour. They are filled with exquisite perfumes.

Business Changes.

Notices of changes in the retail trade, and opening of new businesses, are inserted in this section free of charge, if properly authenticated.

MR. BRIGHAM, chemist and druggist, has commenced business in Selby.

MR. F. GREEN has opened a drug-store at 34 Stockton Road, Sunderland.

M. V. MONTURAT has changed his address from 1 Rue de la Louisiane to 22 Rue de la Chapelle, Paris.

HOVE is rapidly getting well filled with pharmacies. The latest is Mr. Jones's in Church Road. Messrs. P. Josephs & Son did the fittings.

MR. C. B. BELL, JUN., oil-seed and drug-merchant, of 41 High Street, Hull, has sold the business lately carried on by him to Messrs. Casselle & Co.

MR. A. G. GREEN, late of Rhosymedre, has purchased the business of Messrs. Witeman & Son, at Wells, Somerset. Messrs. Berdoe & Co. negotiated the sale.

MR. FRANK GROVER, chemist and druggist, formerly of Folkestone, has had a pretty pharmacy fitted up for him at 12 Crofton Terrace, Brockley, S.E., by Messrs. Philip Josephs & Son.

MR. GUTTRIDGE has joined Mr. John Brothers, chemist and druggist, in his business at High Street, Ashford, and the business is now carried on under the title of Brothers & Guttridge.

THE businesses of Messrs. W. King and R. C. Walshaw, chemists and druggists, Huddersfield, have been amalgamated, and will in future be carried on under the style of Messrs. King, Walshaw & Co. (Limited).

MR. C. J. WAIN, pharmaceutical chemist, late of 27 Stoke Road, Shelton, Stoke-on-Trent, has removed his business to 17 Red Lion Square, Newcastle, Staffordshire, which has been fitted up as a first-class pharmacy.

MESSRS. PINCHIN, JOHNSON & Co., oil merchants, colour, paint, and varnish manufacturers, have removed their works from Cable Street to new premises, Pinchin's Wharf, Broad Street, Ratcliff, E. The address of their City office is 23 Billiter Street, E.C.

MR. BERNARD LANCASTER has taken a shop at Holme Lane, Hillsbro, near Sheffield, and will open it in a few days as "The Hillsbro Pharmacy." It is being fitted up and stocked by Messrs. Evans, Sons & Co., Hanover Street, Liverpool. Mr. Lancaster served his apprenticeship with Messrs. Cubley & Preston, High Street, Sheffield.

MESSRS. W. SCHACHT & Co.'s pharmacy, Finsbury Pavement, E.C., has been purchased by Mr. Hebbeler and Dr. Leins, who will jointly carry it on under the old name. They have secured the sole agency for Kronenquelle water. Mr. Hebbeler will continue in his position as managing director of the Berkefeld Filter Co., and Dr. Leins retains the Buchner pharmacy in Houndsditch.

MR. EDWARD ALLISON has retired from the firm of E. & H. Allison (Limited), Blanket Row, Hull, and Mr. H. Irving Foster, F.C.S., has been appointed a managing director in his place in association with Mr. W. A. Allison and Mr. Fred E. Johnson, F.C.S. These three hold most of the capital amongst them in equal shares. The firm is over a century old, and it is being pushed forward by the new blood. Two new houses have just been taken in order to increase the laboratory space.

Trade Notes.

We are repeating the advertisement this week for an assistant on our editorial staff. Gentlemen who have already written to us need not apply again. They may rest assured that their letters will have the fullest consideration.

DIARY BUYERS' GUIDE.—Under the heading "Rubber stamps" on page 204 of the Buyers' Guide, will subscribers please insert the folio 627, referring to Mr. E. M. Richford's manufactures, which has been accidentally omitted?

MESSRS. F. DARTON & Co., 142 St. John Street, E.C., have just published a gross list of thermometers. It is well illustrated, is comprehensive, and the prices are those which can be shown to customers. Meteorological instruments are included in it.

IN our advertising section will be found an announcement by the Chemicals and Drugs Company (Limited), of Manchester, which shows that the saccharin war is being waged with vigour. It is not possible for us, at this stage of the dispute, to enter into the merits of this interesting patent-struggle.

"SANITAS" EMBROCATION.—This new liniment, which the Sanitas Co. (Limited) have recently placed upon the market, is an exceptionally well-made article, being of good consistency, stimulating and slightly rubefacient in effect, and a grand "rub." It is likely to be popular, for it leaves a pleasant feeling and an agreeable odour about one after use. It is also good for veterinary purposes.

HOME-MADE CAMERAS, &C.—The making of cameras, lanterns, and the like is becoming a hobby amongst amateur photographers, but the modern man likes to have as much done for him as possible—all the preliminaries, in fact—and he does the fixing. It may, therefore, be useful for photographic chemists to note that Messrs. Lonsdale Brothers, 22 Goswell Road, E.C., supply camera-components in every stage of finish.

MR. ALBERT C. DAVIS, who has been lately representing Messrs. Marshalls' (Limited), the makers of fly-reels and enamelled-tube specialities in South Africa, has just returned to this country after a successful business trip. Messrs. Marshalls' (Limited) have lately had their premises at 27 Red Lion Square largely extended, and have fixed up additional machinery, so as to be in a position to cope with their increasing orders.

MINCASEA.—This infants' food can scarcely be called new although it is just brought directly under the notice of the trade, for it was in use before Baron von Liebig told how to make an assimilable food from wheaten flour, and it has remained all these years known chiefly to medical practitioners, through whom it has been introduced to mothers. Messrs. Austen, Frost & Co., 18-20 Cheapside, E.C., have now been appointed sole agents for the food, which is manufactured by Barron-Brooke's "Mincasea" Food Company, and protected prices have been fixed for it.

HYPODERMULES.—This is the title which Mr. Frank A. Rogers, 327 Oxford Street, W., has given to a form of putting up hypodermic solutions in measured doses. The hypodermule is a small glass flask of 3 and 5 min. capacity,



into which the dose of sterilised hypodermic solution is filled; then the neck of the flaskette is closed by fusion. It thus remains sterile indefinitely, and when the physician requires the dose he snips off the neck, as in the first figure, and puts in the hypodermic needle as in the second. Hypodermules are introduced at the suggestion of Dr. Mortimer Granville. They possess obvious advantages over other methods of keeping hypodermic solutions.

BEEF-TEA TABULES.—Messrs. Brand & Co. (Limited), Mayfair Works, South Lambeth Road, S.W., have just introduced a new form of concentrated beef-tea in the form of oblong tablets or tabules, each weighing about 2 dr.,

being sufficient to make $\frac{1}{2}$ pint of pleasant-flavoured and nourishing beef-tea. The special features of the novelty are—(1) the tabules are almost non-hygroscopic and keep unimpaired, (2) they contain no chemical preservatives, and (3) are exceedingly portable. We have examined the tabules, and find them to contain the nutritious as well as the stimulating constituents of fresh beef, and we believe that there is an opening for them in trade and in the household. Each tabule is wrapped, and sells at $2\frac{1}{2}$ d. with a good profit. They are packed in dozen boxes. The tabules are the invention of Mr. Alex. H. Dence, a director of the company.

Marriages.

MACLAREN—ANDERSON.—At 3 Lorne Terrace, Maryfield Dundee, on November 26, by the Rev. Colin Campbell, D.D. John MacLaren, M.B., C.M., Oughtibridge, Yorks, to Agnes Jane Anderson, M.B., daughter of Mr. A. B. Anderson, chemist and druggist.

TWIGG—JESSUP-CLARK.—On October 28, at H.B.M.'s Consulate-General, Shanghai, China, by Sir Nicholas J. Hannen, and afterwards at the Shanghai Free Christian Church, by Rev. S. Dyer, Paul O'Brien Twigg, chemist and druggist, to Ellen Adelaide Jessup-Clark.

Deaths.

BRANDRETH.—At Sing Sing, New York, on November 15, Mr. George A. Brandreth. Aged 74. He was a son of the original Dr. Benjamin Brandreth, compounder of Brandreth's pills, and was the head of the firm of B. Brandreth's Sons of Sing Sing. He was a trustee of the Sing Sings Savings Bank, and a director of the First National Bank of Sing Sing. He had been a member of the Legislature from Westchester many times prior to the war, and was president of the village of Sing Sing for several terms.

CLARK.—On October 31, Mr. Ingham Clark, chemist and druggist, Hull. Aged 75.

MACHON.—Mr. Henry Machon, chemist, of the Market Place, Saffron Walden, died, on November 30, under very sad circumstances. Mrs. Machon was taken ill about two months ago, and became partly paralysed. This so affected Mr. Machon that he became ill, and gradually lost his reason. He was conveyed to the hospital, and Mrs. Machon left in charge of a nurse. Both, however, became worse, and died within a few hours of one another on the day stated. Mr. Machon was a pharmaceutical annuitant.

MORFIT.—At South Hampstead, on December 8, Dr. Campbell Morfit, F.I.C., F.C.S., formerly professor of applied chemistry in the University of Maryland, and one of the scientific advisers of the United States Government. With Dr. James C. Booth he was joint editor of the American Encyclopædia of Chemistry.

RALPH.—One of the oldest chemists of Dover has just passed away in Mr. Thomas Murphy Ralph, of 21 High Street. Mr. Ralph had reached the age of 83 years.

SADLER.—On November 29, at Bedale, Mr. Edward Sadler, chemist and druggist. Aged 69 years. Mr. Sadler retired from business some years since and his establishment is now occupied by Mr. Swinbank.

STEDMAN.—On November 25, Mr. Richard Broomfield Stedman, chemist and druggist, of West Malling, Kent. Aged 76. Mr. Stedman had been in business at Malling for fifty years. He was buried with Masonic honours.

WALTON.—Mr. J. Walton, dispenser at the Samaritan Free Hospital, Marylebone Road, London, has recently died. He had been in the service of the hospital for 39 years, first as assistant dispenser, and for some years as chief dispenser.

ZINTGRAFF.—Dr. Eugen Zintgraff, whose botanical investigations have contributed much to our knowledge of the flora of the German West African colonies, and of tropical Africa in general, died of malarial fever at Teneriffe on December 4.

Legal Reports.

PHARMACEUTICAL SOCIETY *v.* POTTER.

SALE OF POISONS BY UNLICENSED PERSONS.

IN the Queen's Bench Division on Wednesday, before Mr. Justice Hawkins and Mr. Justice Channell (sitting as a Divisional Court), the appeal of the Pharmaceutical Society of Great Britain against a decision of the County Court Judge at Reading, refusing to convict an unqualified person—viz., Andrew Potter, Reading, for selling poison, came on for hearing. Mr. Williams appeared for the Society, and Mr. Gerrans for the respondent.

Mr. Williams, in opening the appeal, said that the proceedings in which the judgment appealed against was given were taken under the Pharmacy Act of 1868, c. 121; and they were taken under the 1st and 15th sections of that Act for the recovery of penalties for selling, and for keeping open shop for the retailing of, poisons. Two questions were raised. The first section made it unlawful for persons other than qualified persons to sell poisons and to keep open shop for that purpose.

Mr. Justice Hawkins: Is not the question this:—Whether the defendant, who never knew of the existence of this matter, retailed poison; whether he, having ordered this particular thing and put it in the back of the shop, sold it, because the shopman took it into the shop and sold it without instructions or title to do so?

Mr. Williams said that whether that was a sale by an unqualified person was the contention of the defendant, who said he had no knowledge of the sale. In this case the evidence was that a person was sent down by the Pharmaceutical Society to make the purchase at Mr. Potter's shop in Reading. He asked the assistant if he sold Harrison's weed-killer, and the assistant said he did, and sold it to the man Partridge.

Mr. Justice Channell: What is the shop in other respects? Mr. Williams replied that he believed the things ordinarily sold there were garden-requisites.

Mr. Justice Hawkins: There was no other poison of any sort or kind in the shop?

Mr. Williams: We could not prove that one way or the other.

Mr. Justice Hawkins: You did not attempt to prove it. It was taken for granted, and it was not shown that on any other occasion any poisonous matter had been sold at all. The real truth appears to have been that for his own purposes, and not for the purpose of sale at all, Potter had procured this killer, which he put in the back place as it ought not to be in the shop, and that without any authority the shopkeeper went into the back place for it, and although there was no mark indicating that it was for sale, he, still without authority, took it into the shop, put it on a shelf there, and when asked by the person sent by the Society if he had this weed-killer, he reached it down and sold some, although there was no price on the bottle. It was not done by the hand of Potter. If it were conceded that Potter had done it, it would have been an infringement of the Act. It would not signify to my mind whether Potter had sold it by his own hand or his manager's if there was knowledge. But the difficulty is this, that it was not an article which they sold. It was not intended for sale. It was the sale by the manager of an article which had not been brought into the shop.

Mr. Williams said that there was this addition, that the weed-killer had been exhibited in the window, though not for a long time.

Mr. Justice Hawkins: If there be in the shop poisonous matters which the principal intends to sell, you may hold him responsible if the manager sells it; but this was not part of the stock.

Mr. Williams, continuing his argument, said that there was no mark of price on the article, but the servant who sold it appeared to have done so at a price which left a profit for his master. But his case was that the prohibition in the 1st and 15th sections was a prohibition against all persons who were not qualified for selling this thing; and it was not necessary, in order to secure a conviction, that he should show with what motive the thing was bought, or that it was

sold with the authority or connivance of the owner of the business. He submitted that under the 15th section of the Act the defendant was liable.

Mr. Justice Hawkins: What do you say he did? Keep and sell, or keep an open shop for retailing poisons.

Mr. Williams replied that the defendant did both, and that through his servant he himself sold; and if the sale took place in an open shop kept by the defendant, then the defendant was guilty of having kept open shop for the retailing of poisons. With regard to the meaning in the Pharmaceutical Act of the word "sell" and whom it included, he did not think there was a decision saying in so many words that it included the manager, but he should say that the principle was that it included both principal and servant; but the provisions of the Sale of Food and Drugs Act closely resembled those of the Pharmacy Act, and under that Act a master, whose servant had deteriorated his milk, had been convicted as the seller of the milk, even although he neither connived at nor was cognisant of the act of his servant. Mr. Williams submitted that the construction of the word should be the same under both Acts, and that the natural meaning included both the principal and the servant who carried out the physical delivery of the article and took the money for it. The Judge below held that the word "sell" in the 15th section of the Act included merely the physical seller who carried out the transaction with his own hands.

Mr. Justice Channell: Admitting he was wrong in that also, still, upon the facts set forth in the Judge's notes, there was no sale.

Mr. Williams said that, assuming that the word "sell" was enough to include both the principal and the agent—

Mr. Justice Hawkins: But how do you make out the agent? There is not a particle of proof of the sale of any article of poison from the time they began business until that once, either by principal or manager. They sold rakes and shovels. (Laughter.)

At this stage the further hearing was adjourned until Thursday.

The hearing was continued on Thursday, when Mr. Williams resumed his argument for the Society, contending that the defendant had not even explained the reason for which he had procured the poison. It was not possible that he did not know it was poison, for it bore the red label. As a matter of fact it contained $\frac{1}{2}$ lb. of arsenic, capable of poisoning a couple of thousand people. Under the circumstances he submitted he had shown all that was necessary—that the seller was the servant, and that the thing sold was a kind of thing, a garden-requisite, which might be expected to be sold in a business for the sale of garden-requisites. It was not necessary to show more in order to secure a conviction, or the difficulty of enforcing the provisions of the Act would be very great.

Without calling on respondent's counsel for a reply, their Lordships gave judgment refusing the appeal with costs. Mr. Justice Hawkins said that if the County Court judge had found that Potter did intend to sell this tin there would have been an end of the case. But the Judge found that he did not intend to sell. If the judge had found that he did intend to sell, it would be immaterial whether he sold with his own hand or by any person authorised to serve in his shop. The tin was there, no doubt; but the judgment must be taken as saying that the tin was not there for the purpose of being sold. The fact that Potter put no price on the tin tended to corroborate the view taken by the County Court Judge that Potter never intended that particular tin for sale. If he did not intend to sell, what was there to make him liable for the sale of a poison he never intended to sell, and which it was no part of the duty of the shopman to sell? The tin had not been displayed on the counter or in the window as if the shopman might assume that it was an article for sale. It was put aside till Potter should come—put aside as an article not to be sold at all.

Mr. Justice Channell concurred, and the appeal was dismissed with costs; and leave to carry the case high was refused.

CCD-LIVER OIL SPECULATIONS.

THE action of Bevan and others *v.* Kumpff, Eckenstein and others, arising out of a speculation in cod-liver oil (as briefly

reported last week), came before Lords Justices Smith, Rigby, and Collins on November 25 and December 2. Sir Edward Clarke, Q.C., on the part of the defendants (except Heald, who had discharged his liability under the judgment), asked their Lordships in the Court of Appeal to set aside a judgment for the plaintiffs given by Mr. Justice Mathew in July on a verdict of a special jury, or for a new trial, on the ground that there was no evidence to go to the jury on one of their findings; that, if there was evidence, the verdict was against the weight of it; and that the learned Judge misdirected the jury in leaving to them the construction of the documents in the case.

The case for the appellants was that in April, 1896, on the strength of a memorandum placed in their hands headed "The Present Position of Cod-liver Oil," which suggested that the restriction in the product of cod-liver oil through a series of years gave promise of a great advance in price, seven of them joined a syndicate and subscribed each for 250 barrels of oil. They heard no more of the matter till the end of June, when Mr. Bevan wrote to the defendants intimating the purchase of a certain number of barrels, including an allotted number for importers' interests and 250 each for the signatories to the memorandum. In February, 1897, a meeting of the parties was held at the office of the importers, Johnsen & Jørgensen, in Eastcheap, at which for the first time defendants heard of the transactions alleged to have taken place under their contracts and of transactions anterior to the date of the defendants' subscriptions, involving the purchase of 1,835 barrels at a cost of about 18,000*l.*, and this at a higher price for the most part than had been paid for any oil up to that time. As the whole transactions resulted in considerable loss—cod-liver oil, instead of (as had been anticipated) rising in price, considerably falling—defendants, on being sued for their proportion of the loss, pleaded that, plaintiffs not having disclosed to them these transactions, and so concealed material facts, they were not bound by the agreement, if at all, longer than the time at which they signed the memorandum.

The finding of the jury—that though there was not concealment of material facts, they were not disclosed, but that was not material—was now challenged, added to which it was said Mr. Bevan, in a letter, had given approximate particulars of the consumption and price of oil over several years, which had the effect of misleading the defendants.

In answer to the case for the appellants, Mr. Joseph Walton, Q.C., for the plaintiffs, put it that the case turned on the document which the syndicate signed. They were invited and consented to join a syndicate for buying at a cheap rate cod-liver oil which was to be sold at an enhanced price—not necessarily at once, but to be kept till prices were favourable.

The hearing of the appeal was resumed and concluded on December 3.

At the close of two hours' further arguments Lord Justice Smith said he thought the appeal should be allowed. It was brought upon a written contract which incorporated no custom, and was in no way ambiguous; but Mr. Justice Mathew left it to the jury to say what was its meaning. This, with all deference to that great judge, he (Lord Justice Smith) thought was not the question in the case; but was it possible to hold the defendants liable under the document to pay for oil purchased previous to the date of the contract, and with which they had nothing to do? Neither side in the case had suggested misrepresentation or bad faith at all, which practically would be the only grounds on which signatories to a document could get off it. There was no reference in the contract to any other contract whatever, and he was of opinion that had it been permissible—which it was not—to read into it the earlier contract between plaintiffs and their brokers they could not bring their earlier purchase of 2,000 barrels into the 3,000 which it was stipulated should be purchased by a syndicate which the document said "was to be formed"—not that it had been formed. On these grounds he thought the appeal should be allowed so far as regarded the purchases previous to the date of the syndicate document, but defendants must be held liable for the losses after that date. Lord Justice Rigby concurred. He agreed that the interpretation of the document was for the judge, and he, moreover, thought the plaintiffs' position untenable from beginning to end, as striving to make the defendants liable for losses on the oil previously bought, without an

express agreement that they should form part of the co-partnership, which this was.

Lord Justice Collins expressed his agreement, and the judgment below was dealt with accordingly, costs being awarded to the defendants.

ALCOHOLIC TEMPERANCE DRINKS.

THE Excise authorities continue to prosecute vendors of temperance beverages which contain more than the legal amount of proof spirit. At Lancaster on December 3, two retailers were summoned. In one case ginger-beer was sold which Mr. J. Robbins, of Somerset House, certified contained 7 per cent. of proof spirit. It was stated that the ginger-beer was home-made manufactured from a recipe by which 6 gallons of water went to 4 lbs. of sugar. Defendant was fined 5*s.*; and in the second case a bottle of herb-beer contained 8.9 per cent. of proof spirit. The bottle bore portion of a Kops ale label, but, Mr. Robbins said, experience taught him that that beverage never exceeded the legal limit of 2 per cent. of proof spirit. It was usually below that and, therefore, he did not think the bottle contained Kops ale. Defendant was fined 5*s.*

AT Ormskirk Police Court, on December 3, Margaret Holt, Skelmersdale, was summoned for selling a half-pint bottle labelled "Hop-bitters"—non-intoxicating—which contained 7 per cent. of proof-spirit.

The defendant said she bought the drink in exactly the same state as she received it, and she sold it in good faith. She was still selling the article.

The Bench inflicted a fine of 40*s.* and costs; 21*s.* being allowed for the analyst's fee instead of the two guineas asked for, he having travelled from London.

FACTORY ACT PROSECUTIONS.

ON hearing the adjourned summons, on December 6, taken out by the Manchester Inspector of Factories, against the Pomona Chemical Company, of Old Trafford, Manchester, for having several vats in the works containing a dangerous liquid not fenced in, the result being that a workman had fallen in and died, the stipendiary said he considered the offence had been proved, and the company would be fined 5*l.* and costs.

AT Chesterfield Police Court, on December 6, Elizabeth Evans was charged, at the instance of the factory inspector, with having employed a child in a factory other than by the half-time system. She was in the employ of Messrs. Robinson & Sons, pill-box and lint manufacturers, and had employed a girl aged 12 on her own account, contrary to the regulations respecting children who had not discharged their educational obligations. The little girl said she worked for the defendant from half-past six to noon, then went to school from 1 P.M. to 4 P.M., and then worked for the defendant at the factory from 4 P.M. until 6 P.M., for which she was paid 1*d.* Councillor Robinson said he knew nothing about the child being employed. The penny was paid by the defendant, and not by the firm. The Bench inflicted a fine of 1*s.* and costs.

SALE OF FOOD AND DRUGS ACT.

CAMPHORATED OIL.

AT Dudley Police Court, on December 3, Mr. Warmington (Town Clerk) mentioned the case in which a fortnight before a general dealer named Mary Ann Smith was summoned for selling camphorated oil not of the substance demanded. Mr. Deeley (who defended) contended that camphorated oil was not in the British Pharmacopœia, though "camphorated liniment" was. The inspector asked for and was supplied with camphorated oil. The Magistrates' Clerk advised the Bench that the prosecution, to substantiate their case, must prove that camphorated oil and "camphorated liniment" were one and the same thing. The case was adjourned for the prosecution to produce evidence on this point. Mr. Warmington now stated that they wished to withdraw the case. Mr. Grainger (Magistrate): That is the best thing you can do. The case was accordingly withdrawn.

TINCTURE OF LOBELIA.

AT Belper Petty Sessions on December 2, Henry Fletcher, grocer and drug dealer, was proceeded against for selling tincture of lobelia which the inspector, Captain Sandys, said was not a tincture at all, as it was devoid of proof spirit. Defendant said he had made a mistake. The Bench imposed a nominal penalty of 10s., with 20s. 6d. costs.

THE PUBLIC ANALYST WRONG.

AT Hastings Petty Sessions on December 4, Mr. Arthur Morriss, grocer, Bexhill-on-Sea, appeared on an adjourned summons charging him with selling lard adulterated with 25 per cent. of beef fat crystals. At the former hearing on November 8 the public analyst, Mr. Samuel Allison Woodhead, of Uckfield Agricultural College, certified to the alleged adulteration, but for the defence Dr. Rideal, D.Sc., F.I.C., stated that the lard was genuine. The Bench decided to send the third sample to the Somerset House laboratory, and it was now stated that the authorities there certified that the sample contained no beef fat, and was genuine, accordingly the case was dismissed and 5l. 14s. allowed defendant for costs.

SODA-WATER AND POTASH-WATER.

A LICENSED victualler, named A. N. Dodds, of the Tram Car Hotel, Market Place, South Shields, was summoned at the South Shields Police Court, on December 6, for selling soda-water which contained only $\frac{1}{2}$ gr. of bicarbonate of soda to the 10-oz. bottle, instead of 15 gr., as required by the British Pharmacopœia.

The Town Clerk prosecuted, and said the proceedings were taken by order of the Town Council. If persons wished to sell aerated water, they could do so by placing a label accordingly on the bottle.

The Chairman: Seeing that Mr. Dodds is not a chemist or druggist, can you carry out your argument that he is selling a medical preparation?

The Town Clerk said, whether he was a licensed victualler or a chemist, he has sold the preparation.

Mr. Pattinson, county analyst, put in his certificate, and, in reply to the Chairman, said: Some years ago the British Medical Association made an investigation into the subject, and the analyst showed that there were scarcely any soda-waters containing soda—1 gr., or $1\frac{1}{2}$ gr. to the bottle, which was practically none at all. The witness would not consider it advisable as a beverage for these waters to contain 15 gr. of soda to one bottle.

Do you think it advisable that the medicinal preparation, containing 15 gr. to the bottle, should be used as a beverage?

Mr. Pattinson: I think it should be sold with a label showing the nature of the preparation.

Mr. W. Dodds, who represented the defendant, said they had a small mineral-water manufactory. Soda-water meant simply water with bicarbonate of soda, which was put through a machine. They made it as well as they could. He hoped the Bench would not make it a serious thing so far as the trade was concerned. The customers wanted a water they could mix with their whisky or brandy.

The Clerk: It is only a question of label.

The Chairman said the Bench were unanimously of opinion that a technical offence against the Act had been committed, but not with the intention to defraud the public. To carry out the object of the Corporation in bringing the action they would impose only a nominal penalty, with the view of making soda-water manufacturers adopt a correct and suitable label.

The second case was against the same defendant, with respect to three bottles containing 0.16 gr. of bicarbonate of potash to the 10-oz. bottle. Similar evidence having been given,

William Bridger, Tyne Dock, was summoned in regard to three bottles containing only 2.11 gr. of bicarbonate of soda per 10-oz. bottle. Mr. Victor Grunhut appeared for the defence, and said the suggestion that a label should be put on the bottles was an afterthought. It was never intended that a label should be put on the bottle stating that the preparation contained so many grains, as the case might be;

and it was absurd for the Corporation to come to say that what they wanted was medicated soda-water. It would be impossible to drink the water in a medicated form as a beverage. If anyone wanted soda for medicinal purposes they should go to a chemist or their medical attendant.

A second case was heard against this defendant; and similar charges were proved against John Telford and Isabella Weatherston.

The Bench said a fine of 5s. in each case would be imposed, the costs to be equally divided amongst the defendants.

COUNTY COURT CASES.

CARRIAGE OF GOODS AT "OWNERS' RISK."

IN the City of London Court, on Tuesday, before Mr. Commissioner Kerr, Mr. Smyth, Leytonstone, sought to recover 8s. 8d. for damage caused to goods belonging to him while in the custody of the defendants—the Great Eastern Railway Company. He said that while his goods were in the hands of the defendants they were damaged by mineral oil. Mr. Chew, solicitor for the defendant company, said they were disputing their liability because, according to the consignment-note under which the goods were carried, they were conveyed at a cheaper rate than ordinary goods. One of the stipulations on the part of the company for taking the goods at a cheaper rate was that they were carried "at owner's risk." Mr. Commissioner Kerr, having perused the documents, told the plaintiff that he had relieved the defendant company from all responsibility by entering into the contract referred to. The plaintiff contended that the defendants could be held liable for negligence, without which the damage would never have been done. Mr. Commissioner Kerr said that was not so. The plaintiff urged that the defendants were liable under the Carriers' Act. Mr. Commissioner Kerr said the plaintiff had excluded the operation of the Carriers' Act by having made a special contract. The plaintiff must be non-suited. The defendants did not ask for their costs.

AT Lambeth County Court, on December 3, before Judge Emden, Mr. Henry Lyon, a baker, sued the Great Western Railway Company to recover 2l. 5s. 6d. for damage to a Tulley's patent egg-box and to 38 dozen of eggs, which he valued at 1s. per dozen. The case fell off the defendants' van and the eggs were smashed during their transit between Paddington and plaintiff's premises. Mr. Mills, solicitor for the company, said he was instructed to say that the company disclaimed liability because their servant, or servants, were not guilty of "wilful misconduct." The owner's risk consignment-note, which was signed by the consignor when he sent the goods off, laid down, as one of the conditions under which the goods were sent, that the company would "not be responsible for loss, damage, misdelivery, delay, or detention, except upon proof that such loss, damage, misdelivery, delay, or detention arose from wilful misconduct on the part of the company's servants." His Honour went very carefully into the evidence, and said he would assist the plaintiff all he could; but, at the conclusion of the case, said the company's servants had evidently been guilty of gross negligence, but there was no evidence of wilful misconduct, and therefore, with regret, he must non-suit the plaintiff. But he should not allow any costs.

ARTIFICIAL MUSK.

IN the Chancery Division of the High Court of Justice, on Thursday, December 9, Mr. Justice Romer commenced the hearing of an action by the Fabriques de Produits Chimiques de Thann et de Mulhouse v. Caspers, for an injunction to restrain the defendant from infringing a patent for a method of producing a substitute for musk granted to Albert Baur, No. 4,963 of 1889. The usual further relief is also claimed. The defence is want of novelty, want of subject-matter, insufficiency of specification, and non-infringement.

Mr. Moulton, Q.C., and Mr. Graham appears for the plaintiffs; the defendant, Chas. Julius Caspers, appears in person.

The hearing of the case was adjourned.

CURIOUS ACTION FOR CARBOLIC-BURNING.

MR. JUSTICE BARNES, sitting as an additional judge in the Queen's Bench Division, on Thursday concluded the hearing, without a jury, of an action for injuries brought against Messrs. White & Sons (Limited), the well-known London mineral-water manufacturers, to recover damages for injuries to a boy named Heaps, who had taken a drink of carbolie acid from a White's "Kaola" bottle in his mother's house, and the object of the action was to show that Messrs. White were responsible for the acid being in the bottle; but this the Judge held the plaintiffs failed to prove, and he dismissed the action.

"Camwal."

THE annual general meeting of the Chemists' Aerated and Mineral Waters Association (Limited) was held at Arderton's Hotel, Fleet Street, E.C., on Tuesday last, Mr. Horace Davenport occupying the chair. The attendance was larger than at previous meetings. The directors' report stated that they recommended a dividend and bonus amounting to 12½ per cent., in spite of the fact that a large portion of the capital had been expended on new factories at Manchester and Birmingham, which unfortunately were not completed in time for the past season's trade. The Manchester factory, however, was now in working order, and the one at Birmingham was also furnished and fitted. In addition to the issue of 11,100*l.* debentures, making a total of 20,000*l.* now out, there had been a loan of 5,000*l.* at 4 per cent. per annum. During the year there had been an increase of 327 shareholders, bringing the total membership to 4,268. The directors proposed to give the employes a liberal bonus as hitherto.

The Chairman, in moving the adoption of the report, said he thought the shareholders would be fully satisfied with the year's working, seeing that the Association had been under disadvantage in having a large amount of capital earning nothing. The directors had had a very anxious year. The erection of the factories had given much anxiety, and he was sorry to say had ended in disappointment, in not being able to get them open for last summer. The new factories were really magnificent, and they were proud of them. He was not an absolute optimist, and he did not expect to be able to come before the next general meeting to declare extremely large profits on these new factories; but he was so far an optimist that he believed it was only a matter of time for them to make a brilliant success with them, as had been the case with their previous enterprises. Nor did he anticipate an enormous influx of business to commence with, but he believed chemists would in time appreciate the benefits of joining "Camwal," and a large number had already promised to join. He did not think, in the districts that had not yet had the benefit of "Camwal," the trade in the syphons (the chief part of their trade) was nearly as large as it might be. Chemists were apt to look on syphons too much as things to be used in the sick-room, and to be sold by twos and threes; they had not yet got the idea that they should be upon everybody's table and placed about the house instead of water-bottles. Chemists should not expect from this class of trade 100 per cent. profit. And they must bear in mind that other tradesmen were doing this trade. Tradesmen who had carts could distribute syphons with greater facility than many chemists. Sales had largely increased, and this result had not been achieved by the accession of a large number of new shareholders, but by an increase in the sales to old shareholders, which proved that chemists as a whole and on the average must have increased their business. He invited chemists to visit the new factories, especially at Manchester, for they were worth visiting. The directors had had to considerably increase capital—which was in the nature of things—and they would probably have to still further increase if they carried out all their present plans. But he invited shareholders to leave this matter with the board, who would not do anything recklessly. It was especially gratifying to note the accession of 327 new shareholders, making the total over 4,000. The Association could therefore claim to have certainly more

than half the chemists who deal in soda-water. He urged shareholders to settle their accounts promptly, no matter how small, for it was small accounts which made their business. Further, he cautioned all chemists against purchasing syphons from small makers, with the view of sending them to "Camwal" to be filled. This could not be done. He concluded by a reference to the Birmingham factory, where, he said, the water had been found to be particularly good.

Mr. Urwick seconded the motion, and complimented the Chairman and directors on their perseverance and energy.

Mr. Wrenn suggested that as a means of profit "Camwal" should sell to shareholders the ingredients which the Association bought largely, such as tartaric acid, citric acid, &c.

The Chairman said they were always willing to supply members with anything appertaining to their business, but they had never been inclined to send out quotations, or lists, because they did not wish to clash with drug-firms. They did not wish chemists to think they were going outside their province.

Mr. Nicholls remarked that the question raised by Mr. Wrenn had been threshed out before. He hesitated to offer remarks on the balance-sheet, but suggested that the outlay in the secretarial department should be closely watched, as it was going up. He complimented the staff on the small amount of bad debts, which also spoke well for the shareholders. He had to complain of five or six syphons bursting—dangerous at all times, but in his case they were also near the carboys. He asked whether there would be any recompense to chemists in such case; if not he must keep his syphons outside, where they would get dirty and unsightly.

The Chairman said the directors could not take any responsibility about bursting syphons. Every care in selecting good glass, and testing, was taken, and moreover each syphon had stood the strain of filling; yet a burst now and then could not be avoided. As to the cost of the secretarial department, it would be likely to go up, because he hoped the business would increase; moreover, the Company paid a slight increase of salary to all employes each year they stayed.

Mr. Dickson asked if the Association was prepared to supply ginger-beer in stone bottles.

The Chairman replied that when they started they had the ginger-beer plant, but chemists seemed to think that trade a little *infra dig.*; but now that ginger-beer had become such a fashionable beverage at golf-links and the like, that trade was worth the attention of the directors and of chemists, and the necessary plant would be got. But he hoped chemists would take it up, for it was disastrous to make ginger-beer for stock. In response to another shareholder, the Chairman said they had made hop-ale, but chemists did not take to it.

The resolution was then agreed to unanimously.

The Chairman then moved the payment of a 10-per-cent. dividend, and 2½-per-cent. bonus, to be paid on December 14. Mr. Brough seconded, and it was carried.

The two retiring directors, Mr. A. Gould and Mr. G. Goldfinch, were re-elected, and returned thanks. On the motion of Mr. Dickson, 50*l.* was voted to the directors. It was understood this was for the Benevolent Fund, or as the directors chose to use it.

Votes of thanks concluded the formal proceedings.

An informal discussion followed in regard to the Chemists Club. The Chairman said it was started with the idea that chemists would be glad to use it for business-purposes. But the Club had not been used to any appreciable extent for such objects; it had, however, developed on the social side. It had been found that the City was not the best position for the Club, and it was proposed to remove to more suitable premises, probably westward. "Camwal" proposed to separate itself from the Club, except in full sympathy, and it was hoped that the wholesale houses and some private individuals would come forward to support the Club.

IT WAS ON A FALL RIVER BOAT.—A fellow was busy cleaning his teeth at the washstand when another rushed over and angrily announced. "Here, you, that's my tooth-brush you're using." "Yours!" exclaimed the man with the brush. "Well, where in thunder is the one that belongs to the boat?" It must be twenty years ago since this happened, for every respectable American now owns a tooth-brush.

"SANITAS" EMBROCATION

in bottles to retail at

3d., 1/-, and 2/6.

"SANITAS"

AND OTHER

DISINFECTANTS

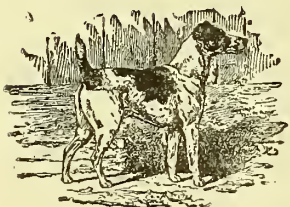
SULPHUR FUMIGATING CANDLES (Patent)

6d., 9d., and 1/- each.

PRESERVED PEROXIDE OF HYDROGEN
(Patent).

MOTH PAPER, BLOCKS AND CRYSTALS.
WEED DESTROYER, &c. &c.

THE SANITAS CO., LIMITED, BETHNAL GREEN, LONDON.
AND 636-642 W. 55 STREET, NEW YORK.



SPRATT'S PATENT Dog Cakes

SUPPLIED TO
NANSEN
EXPEDITION.

ELLIS'S TABLE WATERS

"The water is of exquisite
organic purity, and the
quality of the gas is excel-
lent."—J. ALFRED WANKLYN,
M.R.C.S., Prof. of Chem.

"Absolutely Pure."—
A. URE, M.D., F.R.S.,
L. THOMPSON, M.R.S.,
Analytical Chemists.

SOLE ADDRESS—

[2]

R. ELLIS & SON, RUTHIN, NORTH WALES.

London Agents: W. BEST & SONS, Henrietta Street, Cavendish Square.

HORA & CO.

47 MINORIES, LONDON,

Special Agents for Finest Brands

COD LIVER OIL

Sample and Price on application, stating
quantity required.

There is a DEMAND for MEDICINAL,
LICENCE-FREE

COCA WINE.

The "Galen" Coca Wine gives universal satisfaction as a
remedy, brings repeat orders, and yields a good profit.

THE GALEN MANUFACTURING CO., LIM.

(JOHN MOSS & CO),

Wilson St., LONDON, S.E.

PEPSALIA.

Pepsalia is now being extensively
advertised, and may with safety be
stocked to meet the renewed and
increasing demand.

It bears a good profit, and may
be obtained from the Wholesale
Trade, or from

THE PROPRIETORS, CEREBOS LIMITED, NEWCASTLE-ON-TYNE
AND 3 MAIDEN LANE, E.C.

MELLIN'S FOOD

For INFANTS
and INVALIDS.

COCA TONIC CHAMPAGNE

Prepared and Bottled by the Growers at Bouzy-Reims, from the finest Natural
Champagne, and the leaves of the Erythroxylon Coca, and not from Cocaine.
We supply "Coca-Tonic" Champagne with Chemists' own
name on the Labels.

For prices and particulars, apply to the Sole Proprietors—
HERTZ & COLLINGWOOD, 38 Leadenhall Street, LONDON, E.C.



"PLAIN SENSE BUT RARELY LEADS US FAR
ASTRAY."

Common sense is the strongest argument in favour of

Fletchers' Concentrated Liquors.

Editorial - Comments

THE P.A.T.A. CONTROVERSY.

OUR correspondence section has been the arena of many a
well-contested trade struggle, but rarely have we had the
satisfaction of keeping a ring for such keen combatants as
those who during the past two months have been seeking to
wean each other from the error of his ways. We should be
sorry to close the debate if there is anything more to be said
on either side; but though no one has surrendered, there are
obvious signs that the controversy is tending towards side

issues and the search for flaws by each of the contestants in his antagonist's armour.

Mr. Beecham opened the present tournament by an innocent-looking letter, stating what some retailers of his pills had done at Southampton, one of the strongholds of the cutters, and intimating that he was willing to help in bringing about a similar result in other places. The profit which seemed to satisfy Mr. Beecham's Southampton friends was modest enough in all conscience, and the fact that it should be satisfactory to anybody shows how far we have travelled on the way towards absolute commercial altruism in the drug-trade. But the hopeful aspect of the announcement consisted in the evidence it afforded that even Mr. Beecham was disposed to help the movement towards the protection of the retailer. He would have been a rare catch for the P.A.T.A. if he could be persuaded to go a step or two farther, and Mr. Glyn-Jones, who, like the village pastor, never misses a chance to "try each art, reprove each fond delay," appeared promptly on the scene in the hope of securing this notable prize. It appeared, however, immediately that the reproof at all events, was not to Mr. Beecham's taste, and it is not impossible that he might have come nearer to the fold without than with Mr. Glyn-Jones's guidance.

The battle between Mr. Beecham and Mr. Glyn-Jones being duly opened, Mr. Day sailed in, and the combat was at once doubled in interest. Mr. Day's primary object was to defend himself against the unjust suspicion, which his complaisance in the matter of Beecham's pills might suggest, that he was coming any nearer to P.A.T.A. methods than he was a year ago, when he smote that institution in our columns and in his own advertisements with so much vigour that by all the rules of war it ought to have died forthwith. Mr. Day made it quite clear that if in isolated cases he had consented out of respect to this or that proprietor to accept a trifling profit on the sale of his article, this weakness was not to be construed into anything like a general acquiescence with the sordid principles which govern the mere chemists and druggists around him. His company was formed to bestow the blessing of cheap medicine on 65,000 customers weekly, and though, as far as we can judge from the specimen transactions quoted, it would be a great deal more profitable to close all the shops and invest the proceeds in Consols, Mr. Day is still determined to stand by those 65,000 people who look to him for protection against the organised tyranny of the chemists' ring.

The organised tyranny, which the P.A.T.A. has endeavoured to establish, is, however, according to Mr. Day, such an organised sham that it has failed all round—failed to enforce its minimum prices, failed to cut off supplies from firms on its black-list, failed to get more than three or four out of hundreds of widely-known proprietaries into its net, failed to get the support of more than an insignificant portion even of the retail trade—failed, indeed, to bring forth anything more than a ridiculous mouse after all its violent efforts.

One solid allegation stood out like a rock in the ocean of Mr. Day's rhetoric. It was that his company were at that time obtaining directly and openly from the manufacturers large quantities of "protected" goods, notwithstanding that the name of the company was on the P.A.T.A. black-list. The truth of this statement was admitted as regarded Munyon's remedies, and over this backslide Mr. Day unquestionably scored. "The laugh is with us," replied Mr. Glyn-Jones; "for if Mr. Day does not already know it, I will now tell him that one of the ways by which the P.A.T.A. secures its objects is by arranging for these individual agreements; indeed, for months past firms on what Mr. Day calls our black-list have been freely supplied by our proprietors, provided

in each case they gave an individual agreement to the particular proprietors to maintain P.A.T.A. prices, precisely as in the case of Messrs. Day and Munyon's remedies." Mr. Day fastened on the last clause of that quotation, and not unjustly claimed that if this was true, if, that is to say, the P.A.T.A. was in truth encouraging agreements precisely such as he had made with Munyons, the organisation such as we all knew it was dead. And it came to pass that that very week Messrs. Munyon were asked to repudiate their agreement with Mr. Day's company or retire from the Association. It cannot be denied by anyone who followed the controversy that on this point at any rate Mr. Day's logical victory was complete.

Returning for a moment again to Mr. Beecham, it seems fair to recognise his position. He has colossal business interests at stake; it is no fault of his that vendors of his pills have thrown away the profit which he intended they should have; the vendors of his pills who buy from him by far the largest quantities, and who at present at all events seem rejoiced to sell them without any profit, are urging him to avoid any combination restricting their sale; and, at the same time, those who urge him in the other direction are evidently a small minority of the retailers. It must be obvious too that the greater the business the more difficult is it to maintain a coercive system as regards prices, and while Mr. Beecham has shown a desire to do something it is a little unreasonable to be angry with him for not taking all the risk on himself to benefit traders who, as experience has shown, will not, as a body, take care of themselves.

So far we have looked at this controversy simply as an exercise of skill. We have all watched with a good deal of admiration the artistic fencing of the three principal pensters. Probably each one has had his sympathisers, and all but the most unreasonably prejudiced must have felt a satisfaction in the consideration that such able champions of the three interests concerned—the proprietors, the cutters, and the retail chemists—should have given us of their best in this contention. But we cannot conceal from our view in summing up the dispute that as far as sympathy had any say in the matter Mr. Glyn-Jones had an enormous advantage. If there had been no pecuniary interests involved he might have depended on that from the mere fact of his meeting his two antagonists at the same time. The letters so fell that while he was attacking Mr. Beecham, Mr. Day was attacking him; and when he turned round to face Mr. Day, Mr. Beecham was returning his blows of the week before. Then Mr. Glyn-Jones was unquestionably speaking in the name of a very large preponderance of trade opinion; for it is not to be supposed that the desire to secure a better profit is limited to the subscribers to his Association. And Mr. Glyn-Jones has kept up his double battle with notable ability and with excellent temper. However conclusively it may have been established against him that coercive systems are not the ideal of a free commerce, his contention that "we are in business to live" has been an effective answer to all the criticisms of his opponents, and he will not find a better one. Chemists can put their skill and knowledge to much better use than selling proprietaries at cost-price or at a profit which barely covers working-expenses. And if the P.A.T.A. has indeed failed as completely as Mr. Day alleges in carrying out its special scheme, it has undoubtedly brought this consideration home to the consciousness of thousands of them—a circumstance which all proprietors will have to reckon with.

INTER-COLONIAL RECIPROCITY.

THE first step towards Imperial federation of British pharmaceutical qualifications has been made by the Pharmacy

Boards of New South Wales and Victoria, who have arranged a reciprocity treaty under which each Board will recognise the certificates of the other, with certain reservations. The negotiations have been manœuvred by the active Secretary of the Victorian Board, and have been carried out in a cloud of mystery and with a show of secrecy great enough to cover the negotiations of two empires; but that was only "pretty Fanny's way," and does not diminish in the least the importance of the fact that the arrangement come to is a proof that Victoria is anxious to get the other Australian colonies under her wing, and that New South Wales, the "Mother Colony" and her vigorous rival, has succumbed to the voice of the charmer.

The proposed arrangement, which will be ratified in due course, provides that persons registered by the Victoria Pharmacy Board will, on becoming domiciled in New South Wales, be registered by the latter colony on payment of the usual fees, and that New South Wales registered men will similarly be placed on the Victoria register should they become domiciled in that colony; but as New South Wales is not bound by her Act to accept outside qualifications, it is stated in the memorandum of agreement that acceptance by New South Wales of Victoria registrations "shall not apply to any person who has been registered in Victoria by virtue of a foreign certificate or diploma" (seemingly our Minor certificate is a "foreign" one), so that it will be impossible for immigrant pharmacists to enter New South Wales *via* Victoria. Both colonies appear to be determined not to recognise, if they can help it, the qualification of any colony or country which does not recognise their qualifications, and they agree not to "enter into reciprocal relations with any colonial or foreign boards or colleges" without consultation with each other, but a loophole of escape is left for disagreement by the provision that if one declines the other may conclude the reciprocal relations, and the declining party will not register persons recognised under such relations. All this covers registration up to the present, and the perfection plan is completed by an agreement that the two colonies will jointly conduct a preliminary examination, and that the qualifying examination of New South Wales shall be the same as that of Victoria. This arrangement clearly indicates that if reciprocity is to be extended to the other colonies they must conform to the same standard, which means that intercolonial reciprocity, in the strict sense of the term, will be delayed for a life-time, yet individual colonies may have reciprocity amongst themselves. It is just the same as if Tom Brown said to Jack Smith, "If I see Gwilym Jones with you I shan't recognise him, and you'll do the same when he's with me." This is not exactly the kind of reciprocity which is dreamt of at this end of the globe, but we can overlook it in face of the fact that these two colonies are making a start to do something real in a matter which has long been spoken about as a good thing for British pharmacy.

The *Canadian Druggist* also takes up the question, so far as our North American provinces are concerned. The position of Canada in regard to pharmaceutical certificates is quite as bad as that of Australasia. Seven provinces in the Dominion have qualifying Pharmacy Boards, and not a single one of these recognises the certificates of the others. Speaking to a well-known Canadian pharmacist the other day we learned that this condition of affairs is a great hindrance to business progress in Canada, and he could see no solution of the problem because Ontario, which is rather well stocked with druggists, has during the last few years been putting on the qualification-screw, with the result that the examinations there have been brought to a high level of excellence. The same obtains in Quebec. The

younger provinces are not in that position, and it is perhaps natural that Ontario and Quebec should not recognise their certificates. The *Canadian Druggist* "cannot see why some understanding should not be arrived at whereby a certain standard of qualification should be exacted from all students and reciprocity established between the various provinces of the Dominion." But how is this to be brought about? Each province has made its own pharmacy laws, and reciprocity would mean an abrogation of the whole of those laws. The shortest cut would be to have a Consolidating Act passed by the Dominion Parliament; but before that can be done the various bodies concerned must, we presume, agree amongst themselves, and it would be better to do that altogether than piecemeal.

BULLS AND BEARS IN ZANZIBAR CLOVES.

AFTER some rather wide and sudden fluctuations during the autumn, the price of Zanzibar cloves has become more settled lately at about 3*d.* per lb. This article is such a favourite medium of speculation—perhaps one might say of gambling—in Mincing Lane that it is very difficult to forecast the future course of the market. Indeed, it is owing to the existence of much diversity of opinion on this point that the large speculative transactions which have taken place have been at all possible. "Bulls" point to our diminishing stocks and to the often-stated difficulty of gathering the crop with free labour; while the "bears" say that our stocks are still very heavy, the actual business small, and that the "bulls" will in the future, as they have in the past, be unwilling to take up their purchases when tendered, but will unload and so depress the market and leave the victory with the "bears." Although statistics are not everything, and those of one source of supply alone apt to be fallacious, it may be as well to review the London stocks and prices at this date during the last eight years, which we give approximately as follows:—

—	Stock (Bales)	Price (Pence per lb.)
1891	29,700	3 $\frac{1}{4}$
1892	26,900	3 $\frac{3}{8}$
1893	35,700	2 $\frac{7}{8}$
1894	55,100	2 $\frac{3}{4}$
1895	81,900	2 $\frac{1}{16}$
1896	77,600	2 $\frac{1}{16}$
1897	72,200	2 $\frac{1}{16}$

It can be seen at a glance that the present price is comparatively high for the quantity held in London; but, on the other hand, it will be observed that the stock has been reduced during the last twelve months by 5,400 bales, a considerable percentage of the whole. This fact alone would not be sufficient to warrant the rise in price which has taken place. We must look, therefore, to the position of the new crop to find an adequate reason for the advance in value. The production this season has, as usual, been variously estimated, and it is difficult to arrive at the truth; but it seems to be generally admitted that the crop will be below the average, and that it will not all be picked, because the abolition of slavery makes it difficult to obtain the necessary labourers. Another factor to be taken into consideration is that large sales "to arrive," made on account both of Zanzibar and of Marseilles "bears," were bought back here lately at extreme rates, as much as 3 $\frac{5}{8}$ *d.* per lb., c.i.f. terms, being paid, while the spot value was only 3*d.* per lb. The reason for this could only be the difficulty of obtaining the cloves in Zanzibar, and it appears that such a difficulty actually did

exist, partly due to scarcity of supplies, but more to local buying and to orders from Bombay. Last year the Bombay merchants bought very little, their business being upset by the plague, and they have now been replenishing their stocks. There will not, therefore, be so much to spare for Europe, and it is reasonable to expect that our stock will further diminish during the coming year.

LABBY ONE OF US.

Judy makes Mr. Labouchere a chemist and druggist this week. He stands at a counter, wearing a seraphic smile and white sleeve-protectors, pounding a brass mortar ("The Radical Programme") with a composition pestle. All around the mortar are bottles of "Abolition of the veto of the House of Lords," "Taxation of Ground Rents," and other new remedies of that nature, which are bound to reach the floor if the druggist goes on pounding as he seems to be doing. Whether the artist means this or not we cannot say; the bottles look like convenient properties placed there without a notion as to what counter-irritation will do for them. The nest of drawers behind him are devoted to "municipalisation" roots, barks, &c.

TRACING P.A.T.A. GOODS.

The one objection to the [P.A.T.A.] plan is in leaving it to the manufacturer to put on a tracing number of his own. We hope that the P.A.T.A. will abandon this and leave it in the hands of retailers, who will be materially interested in seeing the system put into operation. By letting each manufacturer have his own tracing system, many of them might be tempted to overlook a consignment which could not be traced.

This is what the *Retail Druggist* says of the Canadian P.A.T.A. plan, which happens to be the same as the British one. The *R.D.* has an axe of its own to grind, as it is the organ of an anti-cutting association, which, as far as we can understand, wishes to stamp all the proprietary goods distributed by the retailer. But the above argument leaves out of account the fact that if any cut P.A.T.A. goods were discovered unstamped the manufacturer's reputation for honesty would be blasted from Dan to Beersheba.

NEW SPIRIT ORDER.

By a General Order just issued the Board of Inland Revenue announce that the *quasi* permission given to spirit dealers and retailers to sweeten and flavour their spirits has been withdrawn; and that in future any dealers making cherry-whisky, raspberry-brandy, rum shrub, or flavoured spirits of any kind in imitation of compounded spirits must take out a compounder's licence. Only such licensed compounders will, therefore, be entitled to mix British or foreign spirits of any kind with flavoring essences or fruit-juices. We do not suppose the Order will in any way reduce the amount of these essences used; its only effect will be to compel a certain number of spirit-dealers to pay the compounder's licence of ten guineas in addition to the dealer's. The same Order contains regulations under which samples of foreign spirits may be exported from bond duty-free. This will no doubt be of advantage to spirit-dealers who have, or who desire to develop, a colonial trade.

WILLING TO WOUND, BUT YET, &c.

A correspondent of the *Medical Times* says there must be numberless doctors who like himself "would not like to bring individual chemists to book who otherwise are respectable men, but who, nevertheless, could and would give valuable information provided their communications could be treated as private, and only used to amass evidence which shall convince the Council of the reality of the evil." He proposes that readers of the paper shall be assured that their communications will involve no legal responsibility, and then asked—Do you know any chemist and druggist who also

advises or prescribes? If so give some particular instances, and say if you consider it a rare occurrence or a frequent practice in your neighbourhood. And the editor asks us (as among his readers) what we think of the suggestion. Well, we are amused with it. We have heard of the pirate whose name goes down to later times linked with one virtue and a thousand crimes, but here we make the acquaintance of a chemist "otherwise respectable" but whose character is besmirched because he gives such advice as he is asked for, and which probably he is quite competent to give. Moreover it seems a pity to trouble the worthy readers of the paper to send in the names of chemists who advise or prescribe. There is an official register sold at 5s., and every man and woman named in it is "otherwise respectable." What then?

THE INFINITELY SMALL.

We find the following letter over the signature of "J. C. McWalter, L.R.C.S. Irel.," of Dublin, in the medical papers of last week:—

May I be allowed to call attention to the fact that much of the syrup of ferrous iodide now found in the pharmacies contains hypophosphorous acid in appreciable quantities? The responsibility for this seems to rest on certain London firms who prepare syrups or solutions for the preparation of these syrups, alleging them to produce more elegant syrups than the methods of the Pharmacopœia. The presence of the hypophosphorous acid being quite unlooked for may explain how it is that *syrupus ferri iodidi* so often produces gastric troubles in young children.

Dr. McWalter raised the topic at the evening meeting of the Pharmaceutical Society of Ireland (*C. & D.*, November 13, p. 756) by supposing a case, but he has very slender grounds, if any, for attributing to hypophosphorous acid the gastric disturbance following the administration of syrup of iodide of iron. The quantity is infinitesimal. One ounce of liquor ferri iodidi rarely contains more than 1 gr. of pure hypophosphorous acid, so that 1 oz. of the syrup will contain $\frac{1}{500}$ gr., and the ordinary dose for a child $\frac{1}{500}$ gr. Considering that Dr. Frederick Churchill's solution of hypophosphites has been one of the most popular tonics for children, and that a single dose of it contains a few hundred times more hypophosphites and hypophosphorous acid than the syrup which Dr. McWalter complains of, it will require a big stretch of the imagination to accept his suggestion as a reasonable one.

XANTHORRHŒA RESINS.

The Scientific and Technical Department of the Imperial Institute has turned its attention to the xanthorrhœa resins—a not altogether profitable subject, considering that these resins are almost unsaleable in London, and that Australian collectors and merchants find no money in the gum-accroides business. However, the point of the note in the Institute journal is that the chemists of the Institute have recently examined a sample of the West Indian resin, and, after referring to the literature on the Australian resins (red and yellow gum accroides), they say:—

The West Indian resin presents the appearance and characters of the "red" resin of commerce. It is light in colour, quite soluble in alcohol, and yields only about 3 per cent. of ash. In composition it appears to agree very closely with the Australian resin—thus, on treatment with alkaline solutions, cinnamic and benzoic acids were obtained. By boiling with nitric acid the resin gave a large amount of picric acid, and on distillation a volatile oil was obtained, which by fractional distillation furnished a large proportion consisting of cinnamene (boiling-point 145° C.). A resinous substance having the peculiar characteristics of the resinotannols was also obtained from it. The results of this chemical examination leave no doubt as to the identity of the West Indian resin with the Australian product, and its fitness for the same industrial applications as the latter, with the exception that its light colour would probably preclude its use as a staining-material for wood.

The only use to which the resin is put, as far as we are aware, is in the manufacture of sealing-wax, to which it gives a certain degree of colour, and replaces shellac better than any other resin.

In Account of the Cutter-and-Cash-Chemist's Qualifying Examination.

AS probably my experience may be of value to many of your readers who are grinding for the above exam., I venture to send you a short sketch of the proceedings as I witnessed them a few weeks ago at the northern centre of the Society.

I presented myself, along with a large number of patent-medicine grocers, Italian warehousemen, stranded wholesale-house men (whose lives had evidently been spent among the "wets"), and a sprinkling of young and very fresh Minor men, and we were in due course ushered into the examination-hall. There we found the President, Mr. Sox, surrounded by the leading lights of the Society, all looking very wise and awe-inspiring. A room is set apart for each section of the examination, and on my name being called out and acknowledged, I was sent to

CASH-CHEMISTRY—THEORETICAL AND PRACTICAL,

and found myself in the hands of the redoubtable Mr. Knight.

I first got a series of searching questions in theory, comprising the Theory of Day, cash-chemical affinity, the Law of Boot, valency (as applied to branch businesses), Red Dragon's hypothesis, P.A.T.A. pressure, the diffusion of proprietary handhills, and the fallacy of the Glyn-Jones Theory. The examiner was very strong on the last item, and asked me all I knew and a lot more, but when I told him that the Theory of Day and the Law of Boot had completely proved the fallacy of the Glyn-Jones Theory, he seemed pleased, and we went on to practical.

I was first put to window-dressing, and managed easily—with a small number of patents boldly labelled, and a very large number of the Society's proprietaries more holdly labelled—to merit Mr. Knight's full approval. I was afterwards put through a severe counter-practice test, and my substitution methods highly approved.

This finished Mr. Knight's examination, and after waiting a few minutes I was sent to

CUTTING—THEORETICAL AND PRACTICAL,

and found Mr. Sox himself awaiting me. He was most urbane, and took me kindly through all the theory of cutting—past, present, and future. Asked me what constituted cutting? Said, pretending to sell goods at cost-price. What was real cutting? Selling your own goods and pretending they were other people's. Name some cutters? Named all I could remember. Did they cut for the benefit of humanity at large or for other motives? Said I reckoned it was for other motives. Give a few motives? Mentioned their individual banking accounts, shareholders, and patent-medicine manufacturers. He then took me on the karyokinetic division of profits to the shareholders, but I was soon at sea there, for he smiled faintly and passed on to the moral clause and conscience theory. Was conscience or morality a necessity in cutting? Said they were totally unnecessary. Asked why? Said they interfered with proper business methods. Give an instance? Instanced the case of the gentleman who trained me, taught me everything, was always kind to me, gave me time for study and recreation, helped me in my studies, gave me good testimonials, used his influence to get me good situations, was the principal means of getting me on in the world. Were I possessed of moral conscience, would he be debarred from opening next door to him, cutting him out, and using knowledge gained of his business for my own benefit and his ruin.

Mr. Sox seemed satisfied, and then took me on practical. I was first given a large number of patents to mark down, and then a number of proprietaries to mark up. Among the props. were the following:—

	Cost Price.			Price.		Our Price.	
	s.	d.		s.	d.	s.	d.
(1) Boulsher's Pills ...	3		My answer:	1	6	1	1
(2) Rubbishiiu Tie Cure ...	2½		"	1	1½	1	0
(3) Brayhard's Cough Boon ...	5		"	2	6	1	11
(4) Quackley's Elixir ...	7½		"	4	6	3	6
(5) Mugwump's Mixture ...	1½		"	1	0	0	8½

Some of these are very complicated, and, as will be seen,

require a lot of calculation and practice to get the correct answer.

After the marking had been satisfactorily accomplished, I was asked to draw out counter-hills for each article, but having had a good experience of patent-medicine and C. and C.C. literature for many years, these were not found at all difficult. I should advise students, however, to read up carefully all such standard works as Seigel's Statistics, Holloway's Homologues, and Beecham's Beatitudes, and to lose no opportunity of studying carefully the methods of Knight, Sox, Black, Snip, and Fields. It is also necessary to cultivate diligently the art of writing original and unsolicited testimonials.

After another short wait I was sent to Mr. Titus Black, who took me on

PHARMACEUTICAL KNOWLEDGE.

He led off by asking if I considered a knowledge of pharmacy essential to so highly cultured and intellectual a specimen of humanity as a C. and C.C.? I said it was not absolutely essential, but that a superficial knowledge of a few of the main points was necessary. Instance a few points? I instanced the reading of prescriptions. He demurred, saying that was not really a necessity at all. I then gave the selling of poisonous patent medicines, and the calling attention of the public to the same. This was not quite satisfactory either, for he pointed out to me that if required what is known as a Minor man to do that, and in very many cases the C. and C.C. was not a Minor man. Then I tried him on drug-recognition—recognising inferior drugs, buying in stale stocks, and the art of mixing and selling the same. This seemed more satisfactory, and I therefore went more deeply into details to prove my grasp of the subject. I was getting on nicely, but again nearly slipped when he asked if I had ever made up prescriptions. I confessed that, inadvertently, I had mixed one or two under compulsion. He looked grave, and I thought at one time he would have ploughed me. However, he merely muttered something about "waste of valuable time," and went on to the preparation of proprietaries. What were the essentials? I said cheapness, big-type labels, rhetorical literature, and skilful counter-practice. In what does the value of an ordinary proprietary consist? On the station in life of the prospective customer. To whom is the ordinary proprietary of most therapeutic value? To the seller.

The final subject was

MODERN BUSINESS PRACTICE,

the examiners being Messrs. Snip and Fields. Mr. Snip asked of what the modern business of a C. and C.C. consisted? Mentioned selling own proprietaries, dressing-cases, perfumes in fancy bottles, cheap soaps, hair-brushes, sponges, stationery, packed teas, patent medicines, and the public generally. He then took me fully on dressing-cases and toilet and face powders, and followed up by a long string of questions on the selection of sponges and the relation of quality to the retail price. Then we went on to proprietary values, and he enunciated the Law of Quackley—viz., *the therapeutic value of a proprietary C. and C.C. article is in inverse ratio to its price.*

He then turned me over to Mr. Fields, who took me on the huying of perfumes and small-tooth combs and the retailing of the same; the storing of soaps, and my knowledge of the various selling points; the exact area of plate-glass, number of mirrors, gas-jets (or electric lamps) required in the modern C. and C.C. store; the exact length of the nameplate, the size of the letters on same, and the distance (under one mile) at which they ought to be seen; the Law of Universal Gaudiness and the futility of the Theory of Good Taste.

This finished my questioning, and almost immediately the President called me forward and congratulated me on having passed so successfully, hoping that I would continue my studies in the higher branches of the science.

BEN VEIGH.

PATIENT: "I am so much better to-day, doctor, I really feel as if I could hear almost anything." Doctor: "Ah, glad to hear it. Permit me to present my bill." (Patient has relapse.)

Bankruptcies and Failures.

Re J. A. GRIFFITHS, Bideford, Chemists.

IN connection with the estate of J. A. Griffiths, chemist, of Bideford, a first and final dividend of 4s. 3½d. has been declared.

Re WILLIAM ASSHETON HOLME, of Newland, Northampton, and Yardley, Hastings, Chemist.

THIS debtor was examined at the Northampton Bankruptcy Court on December 7. His statement of affairs showed liabilities 365*l.* 13*s.* 8*d.*, with assets 58*l.* 1*s.* In reply to the Official Receiver he stated that he went into partnership with his father about 1882, and two years later, his father wishing to retire, debtor's wife paid him 500*l.* That 500*l.* was really a great deal more than ought to have been paid. He had never taken stock; in fact, he had never known a chemist take stock. The chemists' trade in Northampton had gone down very much, and at present the profits were fully 33 per cent. less than they were ten years ago. The large stores had crippled the legitimate chemist. There was not room now in Northampton for more than two or three legitimate chemists. If a chemist added groceries and such-like to his stock he might, perhaps, be able to make the business pay; but the days of a legitimate chemist, except one here and there, were over. The examination was formally adjourned.

Re FERGUSSON & FORSTER, 11 and 12 Great Tower Street, E.C., and 6 and 7 Osborn Street, Whitechapel, Wholesale Spice Merchants and Liquorice Importers.

UNDER the failure of John Clark Forster, trading as above, the first meeting of creditors was held on Tuesday at the London Bankruptcy Court, before Mr. E. Leadam Hough, Official Receiver.

Having dealt with the proofs, the chairman reported that the usual statement of affairs had not yet been filed, but a draft account showed unsecured liabilities 18,251*l.*, and fully-secured debts 15,758*l.* The assets were valued at 11,641*l.*, and consisted of cash at bankers, 668*l.*; cash in hand, 9*l.*; cash in the hands of Mr. John Burke (who had been appointed special manager of the estate), 195*l.*; cash in the hands of the Official Receiver, 325*l.*; bills receivable, 43*l.*; stock-in-trade estimated to produce 2,000*l.*; machinery, trade-fixtures, &c., 950*l.*; furniture and effects at the debtor's private residence, Wildcroft, Buckland, near Reigate, 800*l.*; good book-debts, 3,371*l.*; doubtful and bad debts, together amounting to 250*l.*, but not estimated to be of any value, and an estimated surplus of 3,131*l.* from the securities held by fully-secured creditors. It was pointed out, however, that Messrs. Barclay & Co., the bankers, and perhaps Messrs. Grosscurth & Luboldt, whose securities were among those from which a surplus was expected, had already dealt with the warrants on which advances had been made, and that possibly this surplus was non-existent.

The Chairman said it transpired from the debtor's statements that on the death of his uncle, John Forster, in 1870, he succeeded to his share in the firm of Fergusson & Forster. His partner, Mr. Fergusson, died in 1873, and he (debtor) continued the business alone until 1885 or 1886, when he was joined in partnership by Mr. P. C. Churchley, who introduced a capital of 1,500*l.* to 2,000*l.* That partnership continued until the death of Mr. Churchley, in October, 1896. Since then the debtor had continued the business alone, but under the same style of Fergusson & Forster. In October last he attempted to convert the business into a limited company, with a nominal capital of 60,000*l.* The subscriptions, however, only amounted to 14,000*l.*, and the debtor being advised that that was insufficient for allotment purposes the money was returned to the subscribers. A private meeting of the creditors was held recently at the Cannon Street Hotel, but the debtor was served about that time with a bankruptcy-notice, and decided to file his petition. He attributed his failure to interest charged on borrowed money; interest on advances against warrants for liquorice-juice; depreciation in the value of machinery, trade-fixtures, and fittings, as estimated for a forced realisa-

tion; bad debts, and the expense of the abortive attempt to convert the business into a company.

In reply to the Chairman, Mr. Knight (who appeared for the debtor) said his client was not prepared with an offer, nor could he make one until the statement of affairs was completed. He might state, however, that business-friends were willing to assist in the matter, and if an adjournment were granted, a satisfactory proposal would, no doubt, be formulated.

The landlord of the Great Tower Street premises intimated that, under the powers of the lease, he could enter upon the premises at once, and as he had received an offer for them at an increased rental he proposed to exercise his powers.

The Chairman said the business had been kept open and continued by the special manager, but it was for the consideration of the creditors whether the trading should be further continued. If the information as to securities proved to be accurate, the assets had already diminished from 11,600*l.* to 7,800*l.* Then the book-debts had apparently been taken at their full value; there was the heavy item for machinery, fixtures, &c., which was generally a doubtful quantity; and no valuation had been taken of the stock.

Mr. Knight pointed out that if the business were taken over as a going concern, the goodwill would be preserved, and the creditors must derive more advantage than they could possibly obtain under an administration in bankruptcy.

A discussion ensued regarding the liquorice held by Messrs. Grosscurth & Luboldt. A fear was expressed that if that firm realised their warrants at once they must sacrifice the goods and lodge a proof against the estate for anything up to 10,000*l.*

The debtor said it had always been understood in that particular trade that a sacrifice could always be avoided, because three of the principal firms were always ready to purchase any quantity of the liquorice, on the understanding that the market-price should not be reduced. Eventually Mr. Ponsford, on behalf of Messrs. Stafford Allen & Sons, moved that the estate be wound up in bankruptcy, Mr. A. H. Randall, chartered accountant, St. Swithin's Lane, E.C., acting as trustee.

As an amendment Mr. McEwan nominated Mr. W. Barclay Peat, chartered accountant, 3 Lothbury, E.C., for the post, and it appearing that Mr. Peat would receive sufficient support to carry his election, Mr. Ponsford withdrew the name of Mr. Randall, at the same time protesting that it was most unusual for the nominee of the principal trade creditors to be set aside in favour of one put forward by cash creditors. Mr. Peat was then elected without opposition, and the following creditors were chosen as a committee of inspection—viz., Mr. William Allen (Stafford Allen & Sons), Mr. Henry Robinson, and Mr. Curtis.

The public examination of the debtor is appointed for January 13 next.

The following proofs were tendered, viz.:—

	£	s.	d.
Allen, Stafford & Sons	2,366	4	0
Curtis, R. M., jun.	24	19	2
Forster, — (trustee of the will of Thomas Forster, deceased)	1,634	17	4
Forster, J., and Wood, J.	928	11	5
Forster, J., and Robinson, H.	6,122	8	9
Glennie & Thompson	79	4	5
Grosscurth & Luboldt	600	0	0
Harker & Co., J.	15	17	10
Heywood & Co. (Limited)	4	4	0
Howard & Jones	103	17	3
Irvine & Borrowman	63	1	10
Johns, Son & Watts (Limited)	10	4	0
Latham, A. W. & Co.	44	15	5
MacAndrew & Co., R.	57	17	6
McEwan, A. T.	1,540	0	0
McEwan, Mary	520	0	0
Miller, J. & Co.	34	12	6
Morgan, W. V. and S. V.	12	0	0
Morton, Owen & Co.	16	2	9
Skelton Bros.	11	0	0
Smithers, Walter	17	19	0
Vile, Henry	145	8	2

Re LLEWELLYN VOSPER REES, late of St. George's Road, Bristol, Chemist.

At the Bristol Bankruptcy Court, on December 3, Mr. Dixon asked for the confirmation of a composition of 7s. 6*d.*

in the pound. The Official Receiver reported in favour of the scheme, saying that the liabilities were 82*½*., and the composition had been paid in cash. The order asked for was given, and the bankruptcy annulled.

Re HENRY HEATH, *alias* Hy. Heath Hellier, dealer in chemicals and drugs, late of Hawkhurst and Lydd (Kent), and now serving a term of imprisonment.

MR. HOWARD W. COX, Official Receiver of the Hastings Bankruptcy Court, has issued a statement respecting the realisation of the estate of this debtor. The bankrupt will be remembered as a notorious long-firm trader, who several months ago was sentenced to two years' hard labour at the East Kent Quarter Sessions for offences under the Bankruptcy Act. Debtor's statement of affairs in respect of his failure while at Hawkhurst showed heavy liabilities, the only assets being a sum of money paid into court by the petitioning creditor. This proved far too small to defray the legal expenses connected with the bankruptcy proceedings, and there appeared to be no prospect of the creditors filed receiving any dividend. On his arrest, however, a quantity of goods were seized, and sold by auction for the benefit of the creditors under the Hawkhurst failure some years previous. With the sum realised Mr. Cox is prepared to pay a first and final dividend of 1*s.* 9*½**d.* in the pound.

Gazette.

PARTNERSHIPS DISSOLVED.

Allott, J., and Allott, G., under the style of Allott Brothers, Sowerby Bridge, mineral-water manufacturers.

Buchanan, D. A., and Broughton, A., under the style of D. A. Buchanan & Co., Liverpool, mineral-water manufacturers and ale and porter bottlers.

Hopkins, H., and Andrew, T., under the style of Henry Hopkins & Co., St. Marks Street, Goodman's Fields, and Commercial Street, Spitalfields, E., mineral-water manufacturers and dairymen.

Turner, J., Lee, E. G., and Turner, H. R., under the style of Turner, Lee & Co., Clayton, near Manchester, and Great Yarmouth, chemical-mannfacturers and tar-distillers.

THE BANKRUPTCY ACTS, 1883 AND 1890.

ADJUDICATION.

Browne, Robert, Fenella, Hendon, doctor of medicine.

Deeds of Arrangement.

Chapman, Charles Edward, trading as C. Chapman & Co., Three Crowns Wharf, and residing at 22*½* West Street, Gravesend, wholesale oil-merchant and drysalter. Trustee, Herbert A. Plumb, 90 Cannon Street, London, chartered accountant. Dated November 26; filed December 2. Liabilities unsecured, 213*½* *9s.* 10*d.*; estimated net assets, 203*½* *11s.* 9*d.* The following are scheduled as creditors:—

	£	s.	d.
Barringer, J., & Sons, London	22	0	0
Clough, Walter, London	13	0	0
Diamond Match Co., Liverpool	10	0	0
Hydrolite Co., Ashby-de-la-Zouch	11	0	0
Watson, J., & Son, London	20	0	0

Hallstone, William Edward, 55 High Street, Colliers' Wood, Merton, chemist and druggist. Trustee, William H. Goodwin, 24 Coleman Street, City, chartered accountant. Dated November 26; filed December 3. Liabilities unsecured, 543*½* *4s.* 7*d.*; estimated net assets, 112*½* *10s.* 0*d.* The following are scheduled as creditors:—

	£	s.	d.
Collins, R. S. W., London	108	0	0
Collins, Mrs. R., London	30	0	0
Edmonds, J. C., London	14	0	0
Ford, Shapland & Co., London	21	0	0
Hallstone, W. S., ..	63	0	0
Hockin, Wilson & Co., London	10	0	0
Maby, A. J., London	26	0	0
Maw, S., Son & Thompson, London	20	0	0
Photo Filigrane Company, Liverpool	19	0	0
Sanger, J., & Sons, London	23	0	0

Manchester, Arthur, trading as Tom Manchester, 53 Derby Street, Hulme, and residing at 31 Bradshaw Street, Moss Side, Manchester, mineral-water manufacturer. Trustee, John W. Withnell, 20 Booth Street, Manchester, accountant. Dated November 30; filed December 6. Secured creditors, 533*½* *4s.* 5*d.*; liabilities unsecured, 617*½* *19s.* 9*d.*; estimated net assets, 815*½* *15s.* 7*d.* The following are scheduled as creditors:—

	£	s.	d.
Atcherley & Lunt, Manchester	15	0	0
Barron, Thomas & Co. (Limited), Mexborough	45	0	0
Boote, Edgar & Co., Manchester	27	0	0
Bratby & Hinchliffe (Limited), Ancoats	331	0	0
Hall, J., & Co., Manchester	24	0	0
Hamor, Lockwood & Co., Manchester	84	0	0
Manchester Corporation (Rates)	17	0	0
Tweedie, J., & Co., Leeds	10	0	0

New Companies.

CAMBRIAN LUBRICANTS (LIMITED).—Capital 2,000*£.*, in 10*½* shares. Objects: To manufacture and deal with pitch, tallow, grease and oil. Registered without articles of association.

T. DENNIFORD & SON (LIMITED).—Capital 15,000*£.*, in 1*½* shares. To acquire the business carried on by "T. Denniford & Son" at Russell Street, Plymouth, and to manufacture, sell and deal in syrups, cordials, and mineral and aerated waters.

GENERAL PROCESSES SYNDICATE (LIMITED).—Capital 5,000*£.*, in 1*½* shares. Objects: To acquire, develop, turn to account and deal with certain inventions of John Fordred relating to formulæ for making certain foods and medicines. Registered without articles of association.

PHOTO (LIMITED).—Capital 30,000*£.*, in 1*½* shares (10,000 preference). Objects: To acquire certain inventions relating to photography, to adopt an agreement with the Cresco-Fylma and Hannam (Limited), and to manufacture, sell and deal in photo-sundries. Registered office, 72 and 74 Gray's Inn Road, W.C.

PRESERVED EGG FOOD SYNDICATE (LIMITED).—Capital 5,000*£.*, in 1*½* shares. Objects: To acquire and deal with Patents No. 15,762 of 1893 and No. 29,460 of 1896, granted to John Fordred for "improvements in the treatment of eggs," and to manufacture, sell and deal in foods and medicines. Registered without articles of association.

A. M. POST (LIMITED).—Capital 10,000*£.*, in 1*½* shares. Objects: To acquire and carry on the business of a patent-medicine manufacturer and dealer carried on by A. M. Post at 96 and 98 Leadenhall Street, E.C., and to acquire and turn to account the formulæ of Post's "C.B.Q." and Post's Liniments Nos. 1 and 2. Registered without articles of association.

DYSONS (LIMITED).—Capital 1,000*£.*, in 1*½* shares. Objects: To acquire the business of a drug-merchant, patent-medicine vendor, grocer and general-store keeper carried on by George H. Dyson at 134 High Street, Mexborough, Yorks. The first subscribers are:—G. H. Dyson, chemist's manager, and Mrs. G. H. Dyson, Mexborough; Arthur J. Dyson, 22 Manor Drive, Halifax, gentleman; Frederick W. Hollingworth, chemist, and Mrs. F. W. Hollingworth, Mexborough; Isaac Maude, retired, and Mrs. I. Maude, Barkisland, near Halifax. George H. Dyson is the permanent managing director. Registered office, 134 High Street, Mexborough.

UNCLE TOM'S CURATIVE-MIXTURE COMPANY (registered in Edinburgh).—Capital 2,000*£.*, in 1*½* shares. Objects: To acquire and take over as a going concern the business of Loudon & Co., merchants, 45 East London Street, Edinburgh, and in particular the right to the receipts and information as to the secret and process of manufacture, and the right to manufacture and sell the medicines and medicinal-preparations known as Uncle Tom's curative-mixture, pills, &c., and to carry on the business of chemists, &c. The first subscribers are:—Robert Loudon, merchant, 45 East London Street; J. Mann Grieve, commercial traveller, 61 Clerk Street; J. Fairbairn, commission agent, 4 Coltbridge Gardens; Alex Ireland, clerk, 6 Bellevue Terrace; Jas. Fairbairn, commission agent, 6 Bellevue Terrace; J. Gilbert MacLachlan, journalist, 35 Reid Terrace; H. Boswell, editor, 60 Henderson Row—all of Edinburgh.

More about the New Bill.

SINCE the early part of this issue was made into pages, we have received two reports of meetings held in two important centres—Glasgow and Manchester—at which the amendment of the Pharmacy Act was discussed. We are unable to give the reports the space which they deserve, but we give the points of discussion as nearly as possible.

THE GLASGOW MEETING

was the usually fortnightly one of the local Association, and was held on Tuesday, Mr. W. L. Currie (President) in the chair. The attendance was small but representative. The discussion on "the legal seller" was again postponed, and the meeting turned to the Plymouth proposals. The President deprecated discussion on the first of these, because the Pharmaceutical Council has dealt with it in their draft Bill. As to the second, "pharmaceutical education," he thought the time was not yet ripe—at any rate, Glasgow and Plymouth were practically agreed upon it. After a few words from Mr. Laing, the meeting agreed with what Mr. Currie said.

The meeting voted 10/- to the Association's library, and agreed to sup together some time this session, instead of having a dance.

Mr. J. Anderson Russell read a paper on "The Society and Pharmaceutical Organisation," in which he noted that the local societies now and recently formed were separate particles, and advocated, in effect, that the Pharmaceutical Society of Great Britain should weld them together, not that he regarded the Society as a perfect organisation in itself; indeed, defective organisation, to Mr. Russell's thinking, had been the Society's greatest defect. The local mind did not readily respond to interests apparently a long way off or affecting it but indirectly. Because of the Society's interests having been regarded as of this description, the appointment of local secretaries had had comparatively little effect in arousing enthusiasm. As a contrast to this, he referred to cases of local associations uniting practically all the pharmacists in their district, and arousing enthusiasm to a high pitch, on account of their promoting social intercourse easily taken advantage of by their members, and of their dealing with matters of local interest. If the general body of the Society was to thrive it must, as such, do likewise. All of which conclusively proved that the need of the Society was that now represented in local associations, and the need of local associations was that to be found in the Society. Speaking of the North British Branch of the Society, Mr. Russell said it fell far short of fulfilling one's idea of a branch, and, to avoid confusion, he asked them rather to conceive of a Scottish division of the Society, consisting of all persons resident in Scotland and joined to the Society. That division might hold meetings as often as considered advisable for the promotion of its objects, and might promote better organisation of its members. He proceeded to show how this would benefit the trade in different districts, and suggested that, after consideration by other Scotch Associations, an appeal in regard to the matter should be made to the Council.

Mr. Laing discussed the paper in his characteristic way, and was disposed to be friendly; while the President, referring to the allusions to the North British Branch, said that there was a very serious omission in the resolution passed by the Council in London in November, 1886, regarding the constitution of membership of the North British Branch. Mr. Russell's reference was to the fact that members and associates of the Society resident in Scotland were not mentioned in that resolution. If Mr. Russell had done nothing else he had rendered good service in calling attention to this important point. He (Mr. Currie) thought it was a matter that should be remedied at once. Mr. Currie thought the time had now come—at all events, it was coming—when there must be a different way of electing councillors. Territorial representation was the correct thing. A councillor sitting on the Pharmaceutical Council ought to represent the views of a particular district of the country whether elected in London or elsewhere, and ought to come down to state his views on topics of general

interest to the trade, and get the views of those who elected him. As to the protection of those who practised pharmacy, he did not think the Society had fulfilled that object. He hoped the new Bill would be accepted by the country at large.

Mr. Russell then replied, and his motion in regard to the constitution of the North British Branch was remitted to the Council for consideration.

THE MANCHESTER MEETING

was held in the Victoria Hotel on Wednesday evening, Mr. Harry Kemp presiding in the absence of Mr. G. S. Woolley (President of the Association). After a lecture by Mr. Charles Turner, F.C.S., on "Handy Tests for Water Analysis," Mr. Kirkby moved—

That this meeting is of opinion that between registration of a student and presentation for the qualifying examination an interval of three years should intervene.

He said that at present there were a good many apprentices coming in from country districts who were not up to the standard they required. Mr. Blackburn seconded the motion. Mr. Turner supported it, and said he knew of an unqualified chemist nearly sixty years of age who had come up to try and pass his examination. Mr. J. Rymer Young said it was an act of dishonesty for any chemist to take an apprentice who had not passed his preliminary examination. His sympathies were with Mr. Kirkby in this matter, but he thought it would not be wise to put the matter into the Bill for presentation to Parliament. Any of the points they desired to have in the Bill would raise an enormous amount of discussion.—Mr. Pidd moved the previous question, which was carried by 8 votes to 4.

Mr. Kirkby then moved, and Mr. Pidd seconded—

That the consolidation of the Pharmaceutical Society would be promoted by making eligible for election as members of the Society all those who pass the "Minor" or "qualifying" examination.

The subject was discussed at length, and the resolution was carried unanimously.

Mr. Kirkby also moved a resolution (practically the Plymouth one) in regard to a curriculum Conference, which was also carried.

Trade-Marks Applied for.

(From the "Trade Marks Journal," November 24, 1897.)

"BOKO"; for an anti-incrustation composition. By William Oldershaw, Dilk's Yard, Market Place, Nottingham, chemist and druggist. 207,989.

"DING-DONG"; for dyes (mineral) and pigments. By J. Barnes, 149 Manchester Road, Accrington, Lancs, analytical chemist. 208,030.

"PERODIA"; for chemical substances used for agricultural, horticultural, veterinary, and sanitary purposes. By L. T. Ashwell, Hazelwood, Warrington, Surrey, chemist and druggist. 208,075.

"GNOME"; for vegetable extracts, being for use as food or as ingredients in food. By the Red-Cross Germicide Company (Limited), 61½ Fore Street, London, E.C., manufacturers. 208,145.

"EUGAL"; for all goods included in Class 48. By Bayard, Sons & Bayard, 26 Bridle Lane, Golden Square, London, W., manufacturing chemists. 208,417.

"MONITOR"; for perfumery (including toilet-articles, preparations for the teeth and hair, and perfumed soap). By Bird's Soap Company (Limited), East Moors, Cardiff, manufacturers. 208,763.

(From the "Trade Marks Journal," December 1, 1897.)

Steamer device, with flag bearing the word "Ilford"; for chemical substances used in manufactures, photography, or philosophical research, and anti-corrosives. By the Britannia Works Company (Limited), Ilford, Essex, photographic-material manufacturers. 208,197. Essential particulars: steamer device.

"ZITROL"; for disinfectants. By A. Tooth, c/o Siton Company, 61 Mark Lane, London, E.C., analyst. 208,130.

Sketch of greyhounds and trainer; for a dog-soap. By E. Baker & Co., 5 Stonefield Street, Barnsbury, London, N., dog-specialists. 208,792.

Trade Reports.

42 CANNON STREET, E.C., December 9.

THERE has been a very quiet tone in the drug and chemical markets this week. To-day's drug-sales were not very heavy, but a fair percentage of the goods offered was sold. In fine chemicals there are hardly any changes. Quinine is offering at lower rates. Aloes and tartaric acid quiet. Cream of tartar somewhat firmer. There is a good demand for codeia and cocaine. Gallic and tannic acids have a very firm tendency. Podophyllin is moving upwards. Glycerine is steady, but without change in value. The reduction in the quicksilver-price has not, so far, affected the quotations for mercurials. The drug-market is fairly active. Cascara sagrada is quiet. Cape aloes somewhat firmer. Socotrine without alteration, but firm. Good Sumatra benzoin sold at an extraordinary advance (20s. per cwt.) not warranted by the quality, but ordinary grades sold very cheaply. South American *cinchona* brought very good prices. Liquorice-root is tending firmer, and so is Russian anise. Cod-liver oil steady. Castor oil lower. Japanese *aconite* steady. Cubebs are reported more active and dearer. Balsam Peru scarce and very firm; Tolu decidedly lower. Ipecacuanha 5d. to 6d. dearer, both for Rio and Cartagena. Scammony-root tending lower. Rhubarb steady. Honey very firm. Buchu-leaves lower. Colocynth barely steady. Opium is very firmly held. Essential oils quiet. Lemongrass steady. Cajuput very firm. Sandalwood firm. Beeswax is steady. Vanilla very full up. Coca-leaves scarce and firm. Calumba fully maintains the recent advance. Tinevelly senna steady. Heavy chemicals are fairly active. Bleaching-powder is easier for future delivery. Caustic soda, sulphate of ammonia, and sulphate of copper are tending easier. Saltcake, brown acetate of lime, and anthracene have a firmer tone. Chlorates of potash and soda look like going lower, while carbolic acid maintains a very firm position. Permanganate of potash is easier; cyanide keeps firm. In spices, drysalteries, &c., we have to report a quiet market. Black and white pepper and pimento are quiet, nutmegs easy, mace dull, Zanzibar cloves quiet. Cochin ginger is flat. Shellac is very slow of sale; but there has been an active business in turmeric, and galls are still tending higher. Japan wax is easier. Linseed oil is rather easier, rape steady; crude cottonseed oil easier, refined firmer. Coconut and palm oils are unchanged. Turpentine is dull, and petroleum slow of sale.

The Drug Club held its annual dinner at the Albion in Aldersgate Street on Tuesday. Most of the London wholesale firms, and some of the provincial houses, were represented, the gathering numbering about thirty-six in all. The membership of the club is strictly limited to partners in wholesale drug-houses; manufacturing chemists are ineligible. The members dine once a year, usually in December, and have a business meeting every six months. At the meeting on Tuesday morning, we are informed, no business of any importance was transacted.

An amusing discussion was raised at the drug-sales to-day while Mr. Charles Lambert was in the rostrum, in connection with the date of the next sales. The London Produce Brokers' Association had already fixed the date for January 6. Mr. R. Barron, on behalf of the wholesale druggists, objected to this as a high-handed proceeding, and complained that the druggists had not been consulted in the matter. This, he thought, was only an instance of the way in which the wholesale drug-trade was continually sat upon by the brokers. Mr. Ziegele supported Mr. Barron. On the part of the brokers it was suggested that if the sales were not held on January 6 the

dates of the gum and other sales would have to be altered; upon which Mr. Barron inquired whether the gum-sales were of more importance than the drug-sales? Eventually two dates, of January 6 and 20, were submitted to the room, and the latter date was agreed upon by a large majority. This, we believe, the first instance in which so long an interval as six weeks has been agreed upon between the closing drug-sales of one, and the opening auctions of another year.

A firm of indigo merchants, Messrs. Schoenlank, Engel & Co., send us a copy of their annual review of the indigo market, in which they refuse to share in the depression caused in some circles by the discovery of the synthetic indigo that has lately been placed on the market. After pointing out that the estimated supply of E. I. indigo for the coming season is one of the smallest of the last twenty years, and that the statistical position of the article is more favourable than is generally thought, they say that there would probably have been a general advance in price, but for the appearance of the synthetic product. They think the fact of this discovery has been used by interested parties to depress the indigo market beyond reason, and they state that the manufacturers of the synthetic article can only produce, in the near future, a limited quantity of the product; while, furthermore, the last-named parties have no intention at all of unduly depressing the price of the natural dye. Messrs. Schoenlank, Engel & Co. assert that the practical superiority, or even equality of the synthetic, compared with the natural product, still remains to be proved, and that at present the price of the former is from 20 to 25 per cent. higher than that of the latter. At present the buyers of plant indigo, especially on the Continent, are disinclined to give orders except at prices which must be ruinous to the growers. It is suggested that, unless there should be an improvement in value, many planters will have to close their factories.

At the meeting of the Pharmaceutical Society on Wednesday evening some remarks were made regarding this new variety of capsicum which has recently come into the market. It is a beautiful fruit, as most visitors to the Lane know, and has commanded a higher price than the Zanzibar for that reason. It has been freely purchased by wholesale druggists and spice-merchants, its close resemblance to the official fruit justifying this. A week or two ago Mr. J. C. Umney noticed in the grinding of the fruit that the grinding-room had an unnaturally pleasant atmosphere, and deficient pungency was at once suspected, and has since been proved by him by chemical methods. The Japanese capsicums contain a much smaller proportion of pungent constituents, and more fatty matter than the Zanzibar fruit. The new variety is useless for medicinal purposes and for fortifying soluble essences, but it is a good spice, and will be appreciated by those who like the chillie flavour with a suggestion of its pungency.

Our New York correspondent telegraphing on Thursday afternoon, states that *Honduras sarsaparilla* has been advanced from 36s. to 38s. per lb. for good New York Cablegram. qualities. *Blood-root* is likewise dearer, the price having risen from 9s. to 10s. per lb. *Podophyllin root* extremely firm at 6s. per lb. Prime *Serpentaria* root has gone up to 28s. per lb. There are no price-alterations in fine chemicals, essential oils, or petroleum.

Our Amsterdam correspondent telegraphs on Thursday evening that of the 8,842 packages of *Java cinchona* offered at to-day's public sales only 4,889 packages sold, at an average unit for the *Manufacturing* bark of 7s. per half-kilo (equal to 1½ per lb.) against 7.90s. paid at the auctions on November 4. To-day's sale has therefore resulted in a decline of about 12 per cent., the general tone throughout being dull and with a downward tendency. The American and English manufacturers bought 5,372 kilos.; the Auerbach factory,

The Next
Drug-Sales.

Amsterdam
Cinchona-
sales.

2,613 kilos.; the Brunswick factory, 5,069 kilos.; Mannheim and Amersdam factories, 1,552 kilos.; Frankfurt and Stuttgart factories, 2,421 kilos.; various other buyers, 4,921 kilos. The prices realised for *Manufacturing* bark ranged from 10³/₄c. to 60³/₄c. (equal to 2*l.* to 12*l.* per lb.), and for *Druggists'* barks from 10c. to 99c. (equal to 1³/₄*l.* to 1*s.* 6*d.* per lb.)

Everyone who deals in peppermint oil will be interested to learn that the "HGH" trade-marks will continue to be controlled by the family of the late Mr. H. G. Hotchkiss. The *O. P. & D. Reporter* states that in 1894 the late Mr. Hiram G. Hotchkiss converted his business into a Company, in which he retained 1,910 shares out of 2,000, the other 20 being distributed among his four children. But, at the same time, he divided his own stock in trust among his five daughters and two sons. The two latter will be the active managers of the business. That Mr. Hotchkiss was extremely anxious to keep the business he had created is shown by the tenor of the deed, which contains, among others, the following sentences:—"Whereas the party of the first part (Hiram G. Hotchkiss) has devoted his life to the establishment of a business in essential oils and has succeeded in establishing a large and profitable trade and desires to secure to his family after his death the business so established by him and the returns of his life work," and further: "I hereby request each and every one of my hereinabove named heirs, or their heirs or successors under this trust, not to mortgage, pledge, sell or in any manner dispose of said shares or interest, either legal or equitable, to any person outside of his or her family, meaning thereby his or her issue or descendants."

ACIDS (VARIOUS).—*Citric acid* quiet, at 12³/₄*d.* to 13*d.* per lb. for British make; concentrated juice still quotes at 11*l.* per pipe, f.o.b. *Tartaric acid* quiet, at 1*s.* 1*d.* to 1*s.* 1³/₄*d.* per lb. for B.P. quality, according to holder. Foreign brands (not B.P.) offer at 12³/₄*d.* per lb. on the spot. *Oxalic acid* steady, at 3¹/₄*d.* to 3³/₄*d.* per lb. net, spot. *Carbolic acid* firmly held: crystals, 39-40° C., 7³/₄*d.* to 7¹/₂*d.*; 34-35° C., 7*d.* per lb.; crude 75 per cent., 2*s.* 7*d.*; 60 per cent., 2*s.* to 2*s.* 1*d.* per gallon. *Tannic* and *Gallic acids*, although still unchanged, are tending firmer on account of the advance in the raw material.

ACONITE.—Ten bags of fair but small *Japanese* root offered at auction to-day and sold at 27*s.* 6*d.* per cwt., showing a steady market. Privately business is also reported at the same figure.

ALOES.—The *Cape* variety was represented at auction by two parcels of 41 cases, which were all sold at 6*d.* to 1*s.* per cwt. dearer. Fair bright *Cape* realised from 21*s.* 6*d.* to 23*s.* 6*d.*; partly drossy 22*s.*; duller and more drossy 15*s.* 6*d.* to 20*s.*; soft 18*s.*; and very low drossy 10*s.* per cwt. Ninety-seven packages of *Curaçao* aloes were offered, of which 80 sold at from 27*s.* to 33*s.* per cwt.; nice brown good flavour realised 35*s.*, and medium to dull capey 22*s.* per cwt. *Socotrine* aloes was represented by 30 kegs of good colour, which were bought in at 80*s.* per cwt. nominally. A parcel of very low, black and burnt *Curaçao* of old import, in gourds and small boxes, was offered without reserve, and realised 5*s.* per cwt. This was from the stock of a recently deceased wholesale druggist.

BALSAM PERU.—Only 1 case of genuine quality offered to-day, and was bought in at 8*s.* 6*d.* per lb. The market is extremely firm.

BALSAM TOLU considerably lower. Six cases of good hard tolu, fair aroma, were offered for sale to-day, and sold at 2*s.* 2*d.* per lb. About a fortnight ago the same quality realised 2*s.* 9*d.* per lb.

BENZOLIN.—Of *Siam* gum 35 packages were offered, of which 28 sold. For 3 cases of small to medium almonds of rather dark colour, part slightly blocky, a bid of 13*l.* 5*s.* was refused. Two cases, not quite so good, realised 13*l.* 10*s.* per cwt. Small to bold loose almonds, good colour, fair flavour, realised 16*l.* 5*s.*; ditto, slightly blocky, 15*l.*; smaller almonds in grain block, 7*l.* to 7*l.* 10*s.* For a parcel of hard block, small siftings, 75*s.* was refused, 80*s.* being the limit. Rather

dull pickings realised 85*s.*; small grey siftings, blocky, sold at 39*s.* to 40*s.*, subject, these figures being about 3*s.* dearer than those of the last auction, while dust went for 10*s.* per cwt. *Palembang*: 2 cases of good quality were sold at 45*s.* per cwt. *Penang*: 5 cases false-packed seconds, with few almonds, were taken out without mention of price. *Sumatra* gum was in large supply, 272 cases being offered, of which 110 sold at an advance of from 15*s.* to 20*s.* per cwt. for the finer qualities. Good seconds, small to bold pale almondy centres realised 8*l.* 2*s.* 6*d.* to 8*l.* 15*s.* per cwt.; good small to bold almonds, false-packed ends 6*l.* 15*s.* to 6*l.* 17*s.* 6*d.*; ditto, not so good, 6*l.* 10*s.* per cwt.; 27 cases of good seconds sold at 7*l.* 12*s.* 6*d.* to 8*l.* for nice white almondy gum, little flavour, false-packed sides. Four cases, offered "without reserve," realised 87*s.* 6*d.*; fair centres, very false-packed ends, brought 82*s.* 6*d.* to 85*s.* per cwt.; 16 cases ordinary woody thirds, brown ends, were sold at 70*s.*

BUCHU.—Twenty-three packages were offered at auction and partly sold at a reduction of ¹/₂*d.* to 1*d.*, especially for ordinary yellowish qualities. Good round green leaves, which realised 6*d.* at last sales, now sold at 5¹/₄*d.* per lb., ordinary yellowish and discoloured at from 2³/₄*d.* down to 1³/₄*d.* per lb. Three bales fair green rather dark mixed leaves realised 5*d.* per lb. Another parcel of good green round, fair aroma, also brought 5*d.* per lb.

CALUMBA.—All qualities remain in good demand and realise very full to higher prices. At auction 5 bags of good yellow washed root were bought in at 7*s.* per cwt. nominally. Three bags of small to bold partly cleaned root were held for 50*s.* per cwt. Another lot of 18 bales rather dull mixed sorts was bought in at 55*s.* per cwt. Fifteen bales fair yellow washed pickings sold at the firm price of 50*s.* per cwt.

CARDAMOMS.—The moderate supply of 107 packages offered to-day met with a fair demand, 63 packages finding buyers. *Ceylon-Malabar*, medium to fair brown round, were limited at 3*s.* 3*d.* per lb., which was not obtainable. For *Ceylon-Malabar*, medium to bold, nice pale bleached, 4*s.* is asked; smaller ditto realised 3*s.* 10*d.*; medium to bold long pale full, 3*s.* 6*d.* to 3*s.* 8*d.*; medium yellowish, 3*s.* 6*d.*; small to medium round long, part split, 3*s.* 2*d.* to 3*s.* 4*d.*; small round pale, 2*s.* 7*d.* to 2*s.* 8*d.*; very small palish round, 2*s.* 6*d.* per lb. Seventeen cases of bold brown "wild" *Madras* cardamoms were bought in at 2*d.* per lb., no bid being made; fair bright seed brought 2*s.* 9*d.* to 2*s.* 10*d.*; duller, 2*s.* 8*d.* per lb.

CASCARA SAGRADA.—Without change, at 17*s.* 6*d.* per cwt., e.i.f. terms. At auction 100 bags of rough dark and thick quality was bought in without mention of price.

CASTORUM.—The annual sale of castorum by the *Hudson's Bay Company*, was held at the Commercial Sale Rooms on Wednesday. The supply offered was rather larger than usual—viz., 1,850 lbs. There was a fair attendance of buyers, but prices were very irregular, first and second quality being mostly dearer, and ordinary grades much cheaper than at last year's auctions. Privately, high rates had been paid before the sales. At auction the following prices were realised:—Firsts, 67*s.* to 77*s.*; firsts and seconds, 51*s.* to 63*s.*; seconds, 67*s.*; thirds, good to common wet and mouldy, 29*s.* 6*d.* to 55*s.*; pickings, 24*s.* 6*d.* to 39*s.* per lb. About 330 lbs. of *Oreogon* castorum were mostly sold at 50*s.* to 55*s.* for firsts, 46*s.* for firsts and seconds, 37*s.* to 40*s.* for seconds, 29*s.* to 32*s.* for thirds, and 26*s.* per lb. for pickings. Two lbs. of *Musquash* pods realised 4*s.* 3*d.* per lb.

CINCHONA.—The last London cinchona-bark auctions of the year will be held on Tuesday next, December 14. Up to the present the following quantities of bark have been declared for sale—viz., 325 packages *Ceylon* and *East Indian*, 177 packages *Javan*, 259 packages *West African*, and 621 packages *South American*. A fair proportion of the latter is *Cuprea* bark. At auction to-day 38 bales damaged thin flat *Bolivian Calisaya* sold at good prices—viz., from 9*d.* down to 4*d.* per lb.; a lot of stout yellow flat pieces slightly damaged is held for 10*d.* per lb. Of 46 packages *Huanoco* and *Loza* bark 23 sold at slightly firmer prices, 1*s.* to 1*s.* 5*d.* per lb. for fair to fine thin quill, 10*d.* to 11*d.* per lb. for fair partly broken ditto. Three bales red chips sold at 4*d.* per lb. for *East Indian* and 3*d.* per lb. for *Ceylon*.

COCA-LEAVES.—Privately the market is very firm at 8*d.* per lb. for fair greenish Truxillo leaves. Of 54 bales Truxillo offered at auction, 6 sold at 8*d.* per lb. for fair greenish, and 5*d.* per lb. for ordinary damaged. Nine cases of good *Huanuco* character leaves from Ceylon sold rather cheaply at 6*d.* per lb.

COLOCYNTH.—For good pale *Syrian* apple 1*s.* 1*d.* per lb. is being asked privately, and bids of 1*s.* per lb. are said to have been refused. Our stock is not very large, but a parcel of 150 cases is reported to have been sold direct to Hamburg from Jaffa. At auction 11 cases of good, partly pale *Syrian* apple were offered. A bid of 1*s.* per lb. is to be submitted for these. One case of fair Spanish sold at 9*d.* per lb. A correspondent writes to us from Jaffa (Syria), under date of November 24:—"It will no doubt interest your readers to learn that the crop of colocynth of the new season now in progress is very abundant, and that the price of the drug in this country has already fallen considerably."

CREAM OF TARTAR is still tending upward, the prices this week showing an advance of fully 6*d.* per cwt. over those of our last report. Best white *French* crystals are now quoted at 74*s.* 6*d.* to 75*s.*, powder at 76*s.* 6*d.* to 78*s.* per cwt. according to brand and holder.

CROTON SEEDS remain neglected. At auction ten bags of ordinary part small and dull from Shanghai sold very cheaply at 13*s.* per cwt. Another lot of two bags, rather dark mixed Ceylon, was bought in at 40*s.* per cwt. nominally.

CUBEBS are in better demand, up to 30*s.* per cwt. having been paid privately this week, it is said; but at auction there were no buyers. Five bags only were offered. They were of fair quality, rather dusty, but without stalk, and were bought in at 37*s.* 6*d.* per cwt.

DAMIANA-LEAVES.—Very firm, and tending higher. New crop, to arrive, offers at 9*d.* per lb., c.i.f.

DRAGON'S-BLOOD.—Fine quality is still unobtainable. Three cases (the only lot offered to-day) of ordinary saucers, of dark colour, sold at 85*s.* per cwt., a rather better price than was obtained recently.

ERGOT OF RYE.—Very firmly held. At auction 35 packages were offered; 13 of these were *Russian* of fair quality, slightly wormy. They are held for 10*d.* per lb. Another lot of four bags, good sound *Russian* was bought in at 10*d.* per lb. Eight bags new, fair to good sound *Russian* ergot, from Libau, were bought in at 10*d.* per lb.

ETHER.—In our report of last week we referred to a reduction in the price of *Howards'* quotations of ether from pure spirit. Messrs. A. White & Sons inform us that they have made no alteration in their quotations, and that such changes as have occurred are limited to one firm. The only alteration, our informants say, which is likely to occur is that methylated ether is likely to advance in price.

GALLS.—The upward movement in *Chinese* galls is well maintained, 59*s.* per cwt., c.i.f., having been paid for December-February shipment. On the spot firm rates are also asked. In *Persian* galls business is practically suspended on account of the high quotations that rule, up to 57*s.* 6*d.* per cwt. being asked for fine blues, 48*s.* to 50*s.* for greens, and 50*s.* to 52*s.* 6*d.* per cwt. for sorts.

GAMBOGE.—The small supply of 8 cases only was offered to-day. Four of these were of partly nice fracture and partly blocky, and of good appearance. Two sold at 7*l.* 17*s.* 6*d.* per cwt., which marks an advance of fully 2*s.* 6*d.* per cwt. The other four were of good bright fracture, loose pipe, and were bought in at 8*l.* 10*s.* per cwt.

GUAIACUM.—Nine cases were offered at auction to-day "without reserve." They consisted of ordinary rough sorts, blocky, and woody drossy mixed, partly good, of which two sold at 5½*d.* per lb.—a fair price. A box of dull, hard, stony mixed block was bought in without mention of price.

GUM ACACIA.—East Indian gums are fairly steady, with a moderate demand at 32*s.* to 33*s.* per cwt. for good fair *Cannopore*, 20*s.* to 36*s.* per cwt. for common to good pale *Ghatti*, and 29*s.* per cwt. for *Oomra*. There is a fair stock of *Aden* gum, which sells slowly at the rate of 45*s.* per cwt. for fair clean reddish. Ordinary to fair glassy red *Australian* gum realises from 28*s.* to 29*s.* per cwt. *Persian* gum in

demand, but firmly held, at from 20*s.* to 26*s.* per cwt. for reddish to fine pale picked, and from 16*s.* to 21*s.* per cwt. for sorts. At auction various parcels of fair to good picked *Trieste* gums were shown and bought in at nominal prices.

HONEY.—*Jamaica* honey was represented at auction by 34 packages only, of which 10 sold at a steady price—viz., 23*s.* 6*d.* per cwt. for rather thick candied brownish and dull mixed. Twenty cases fair thick yellow *Italian* honey, offered "without reserve," sold cheaply at from 20*s.* 6*d.* to 22*s.* 6*d.* per cwt.

IPECACUANHA.—*Rio* root, of which 45 packages offered at auction, sold at an advance of from 5*d.* to 6*d.* per lb. on the last sale rates. Fair sound annulated root realised 7*s.* 2*d.* to 7*s.* 6*d.* per lb.; dull to fair rather woody, 6*s.* 10*d.* to 7*s.* Fine picked was bought in at 10*s.* per lb. nominally. Privately the asking price for picked is 8*s.* 6*d.* Of *Cartagena*, 5 packages only offered, 3 of which sold at 6*s.* (an advance of 6*d.* per lb.) for woody, dull, slightly damaged root. A *Cartagena* steamer, just arrived, has brought none. The stock of *Rio* root in first hands is estimated at 100 packages.

JALAP.—Two parcels consisting of 17 packages were offered to-day. Eight of these were *Vera Cruz*, of rather small to medium quality, fair colour. This lot was bought in at 7*d.* per lb. The other lot consisted of old *Tampico* offered "without reserve on account of executors," the parcel being understood to have belonged to a recently deceased druggist. The root was evidently very old, though the year of importation was not stated, and of a character not usually seen at our drug-auctions nowadays. It was pale, small, irregular, very woody and wormy, and realised comparatively good prices, from 4½*d.* down to 2*d.* per lb.

KINO.—Privately sales have been made of good bright *Cochin* kino at 15*s.* per lb. Two tins of this description offered to-day and were bought in at 17*s.* per lb., no bids being made. Four cases small to medium red, partly blocky *Zambesi* gum, were again shown and bought in without mention of price. Three cases of fair partly block, dark coloured *Australian* kino from Sydney were bought in without mention of price.

KOLA.—Four small consignments, totalling 27 packages, of *West Indian* kola were offered at sale to-day, and a portion sold at 5*d.* for sound, and from 3*d.* to 4*d.* per lb. for damaged quality. Another lot of nice washed *W. Indian* kolas is held for 7*d.* to 7½*d.* per lb., and fair natural at 6*d.* per lb.

LIQUORICE-ROOT.—Ten bales of decorticated *Russian* root, which have been offered at auction repeatedly, were again bought in at 35*s.* per cwt. to-day.

MATICO.—Ten bags of fair to dark quality were all bought in to-day at 1*s.* per lb. The market is somewhat neglected.

MORPHIA.—Eighty-five oz. *Sulphate*, "lying at a private warehouse," brand not stated, were bought in. The price is 4*s.* per oz., and a bid of 3*s.* 6*d.* per oz. was rejected. The article is one for which there is very little interest in this country except for export.

MUSK was represented at auction by ten tins, which included some of fine quality. Four tins of old-fashioned first pile *Tonquin* pods, small to bold, dry top skin and under skin, were bought in at 65*s.* per oz. One caddy of small to bold thin blue and under skin, well trimmed, some broken, was reported sold privately; another was bought in at 80*s.* per oz. Ordinary grain musk was bought in at 15*s.* per oz.

MYRRH.—Without demand at auction. Sixty packages were offered, but only a few found buyers. One case of fair pale native picked *Aden* sold "without reserve" at 75*s.* per cwt. Good bold picked gum is limited, at 5½*s.* per cwt. nominally.

OIL (CASTOR).—*French* castor-oil offers at lower rates—viz., 30*s.* to 31*s.* per cwt. for first, and 29*s.* to 29*s.* 6*d.* per cwt. for second pressing, on the spot. For delivery next year prices are decidedly easier: first six months 27*s.*, last six months 24*s.* per cwt., landed terms, for first pressing. *Belgian* oil is quoted at the same rates. The quality of some brands of *Italian* castor-oil is said to be very inferior this season, but for some well-known brands which are in good condition the quotation has been advanced, 45*s.* per cwt. being now asked for fine oil delivered in London, but from Leghorn we get quotations of 37*s.* to 38*s.* per cwt. c.i.f. *East*

Indian oil is quiet and in moderate demand, but prices rule steady: fine firsts $5\frac{1}{4}d.$, yellow to good pale seconds $3\frac{1}{2}d.$ to $4\frac{1}{2}d.$ per lb. Fifty cases of yellow seconds *Calcutta* were bought in at $4d.$ per lb., and 13 cases colourless *Italian* at $4\frac{1}{4}d.$ to $5d.$ per lb.

OIL (COD-LIVER).—Ten casks of "finest new" Norwegian non-freezing oil (TC brand) were offered at auction to-day and bought in at $75s.$ per barrel. Privately the price is from that figure down to $72s. 6d.$ per barrel, with a steady tone.

OILS (ESSENTIAL).—*Sandalwood* oil firmer on account of the advance in the price of wood in India. A fair quantity of eucalyptus oil was offered at auction to-day. *Cygnat* brand was bought in at $1s. 8d.$ per lb.; H. Clarke (from Victoria) is held for $1s.$ per lb. For RMG Tasmanian oil $1s. 8d.$ per lb. is asked. At auction there was a rather large supply of *Cinnamon* oil. One case of this oil was bought in nominally at $4s.$ per oz.; others are limited at from $1s. 7d.$ down to $1s.$ per oz. Two cases of very poor rank quality were knocked down at $5d.$ per oz. There is plenty more of this same lot on hand. *Lemongrass* is extremely firm, and nothing can be had on the spot below $8d.$ per oz., but it seems doubtful whether more than $6d.$ per oz. has yet been paid. There is practically nothing offering to arrive. At auction 10 cases, "land carriage," were bought in. Another lot of 25 cases imported via Hamburg is limited at $8d.$ per oz. At auction it was bought in nominally at $1s.$ per oz. One case distilled W.I. *Oil of limes* sold at $3s. 3d.$ per lb., which shows no alteration compared with the last sale at auction. For three cases *Nutmeg* oil offered "without reserve," and sold at lower prices, viz., $1\frac{1}{2}d.$ to $2d.$ per oz. One case *Oil of Petitgrain* of fair quality is held for $4s.$ per lb. *Rose* oil: Five pots of usual *East Indian* quality were catalogued, but were reported "sold privately." Five vases of *Osso* of rose (8 oz. each), described as "manufactured by P. Neykoff & Co., Bulgaria," were placed in auction. A bid of $15s.$ per oz. was made for one, but the lot was taken out at $25s.$, although a little less would be accepted. *Star-anise* oil is quoted nominally at $7s. 9d.$ per lb. on the spot, but $7s. 6d.$ per lb. would no doubt be accepted. There are sellers (second-hand) to arrive at $6s. 11d.$ per lb. c.i.f., but the first-hand quotation is $7s. 1d.$ per lb. c.i.f. Market very sluggish. *Cassia* oil quiet: $75-80$ per cent. is quoted $6s.$ per lb. on the spot, and at $4s. 9d.$ per lb. c.i.f. terms; for $70-75$ per cent. $5s. 3d.$ per lb. spot is asked. *Cajuput* oil very scarce, at $4s.$ per bottle on the spot. For *Citronella* oil, November shipment, $1s. 1d.$ per lb. c.i.f. terms, in drums, has been paid, and on the spot, nearest quotation is $1s. 3d.$ per lb. for drums, and $1s. 4d.$ per lb. for tins. Of *Peppermint* oil several parcels *American* and *Japanese* were shown at auction. These were all bought in. *American* HGH is unchanged at $5s. 6d.$, to arrive. *Japanese* 40-per-cent. offers at $5s.$ per lb. on the spot, and a telegram from Japan to-day quotes $5,000$ lbs. of 40-per-cent. oil at $5s. 1\frac{1}{2}d.$ per lb. c.i.f. terms. *Decemtholised* oil on the spot offers at $3s. 3d.$ per lb.

OPIUM.—*Persian* opium is quiet, at from $10s. 3d.$ to $10s. 9d.$ for fine to superior, and from $9s. 6d.$ to $10s.$ per lb. for ordinary to good quality. In *Turkish* opium scarcely any business has been transacted this week, nor is there much prospect of a revival of activity during the remainder of the month. Prices are unaltered: fine druggists' kinds at $9s.$ to $9s. 3d.$; seconds, at $8s. 3d.$ to $8s. 6d.$ per lb. For fine soft shipping opium bids of $11s.$ per lb. have been refused, and as much as $11s. 6d.$ per lb. is asked by some holders. Second quality is quoted up to $10s.$ per lb.

ORRIS.—Fairly steady, and in small supply at auction. Sixteen bags of fine bold pale *Florentine* root were bought in at $55s.$ per cwt. Another lot of 20 bags medium to bold, rather yellow mixed *Verona* root, was bought in at auction, but has since been sold at $32s. 6d.$ per cwt., a good price. Of 14 bags *Mogador* root, fair pale quality, were bought in at $30s.$ per cwt.

QUICKSILVER.—On Tuesday the principal importers lowered their price by $2s. 6d.$ per bottle—viz., from $7l.$ to $6l. 17s. 6d.$ There are now second-hand sellers at $6l. 17s.$

QUININE offers at lower prices. The *Brunswick* and *Auerbach* agents have received orders from their principals

to quote $1s. 2d.$ per oz. for prompt delivery, and both report several transactions at that figure. The total turnover is not likely, however, to be a large one, and there is a general suspicion that in these quotations we have again to deal with a deliberate attempt to depress the market, in order to enable the manufacturers to buy back at to-day's Amsterdam auctions at lower rates than they would otherwise be able to secure. The market preserves a firm and confident undertone, but, pending the publication of the result of the auctions, prices are nominal. One case containing ten tins of 100 ozs. each, *Taillandier's* brand, was offered at auction to-day. It is limited at $1s. 3d.$ per oz.

RHUBARB.—The demand at auction to-day was very poor, 35 packages only finding buyers, out of 191 offered. *Shensi*, small to medium, good coat flat pinky grey fracture realised $2s. 3d.$ per lb. *High-dried*: Four cases of flat bold dull coat, fair fracture, $11\frac{1}{2}d.$ per lb.; small common round, $7d.$ No *Canton* root was sold.

SARSAPARILLA in small supply at auction to-day, twenty-five bales being offered. Ten bales of good *Lima-Jamaica* were bought in at $1s. 6d.$ per lb. nominally. Two bales of very wormy *Guayaquil* were taken out without mention of price. Common *Mexican* of chumpy character sold at $3d.$ per lb. Two bales of fair native *Jamaica* in bundles, partly damaged, sold at $10d.$ to $11d.$ per lb.

SENEGA.—Thirteen bales of good root were bought in without mention of price. For arrival $1s. 3\frac{1}{2}d.$ per lb. is asked privately.

SENNA.—Of *Tinevelly* senna, 139 packages offered at auction to-day. Fair bright green leaves sold at $3d.$ to $4\frac{1}{2}d.$; ordinary to medium yellowish dark at $1d.$ to $3d.$ per lb. A steamer from India with 107 bales *Tinevelly* has arrived, but owing to a fire which occurred on board at the London docks, part of this consignment has been damaged. A portion of the shipment was to have been offered at to-day's auctions. Three bales *Alexandrian* siftings sold at $3\frac{1}{2}d.$ per lb.; fair leaf was bought in at $4\frac{1}{2}d.$ to $7d.$ per lb. *Mecca*: 18 bales are held for $2d.$

SHELLAC.—The market remains very quiet and practically without alteration in price. For shipment, orange TN, December-February, is quoted at $59s.$ per cwt., c.i.f. terms; and early in the week 100 cases, November-January shipment, sold at the same price. For nearer positions the nominal quotations are from $60s.$ to $62s.$ per cwt., c.i.f. In the speculative market there are sellers for December delivery at $63s. 6d.$ per cwt., January delivery at $63s.$, and for March at $64s. 6d.$ per cwt. For shipment December-February $59s.$ per cwt., c.i.f., is quoted. The market closes with a dull tone.

TONCA-BEANS shows very little life. Two cases small block *Pará*-beans, partly foxy mixed, were bought in to-day at $1s. 6d.$ per lb. Another lot of 10 casks was bought in, good crystallised, small to medium, at $2s.$ per lb. One cask of fine bold *Angostura* beans is held for $8s. 6d.$ per lb.

TURMERIC.—There has been a good business done lately in *Bengal* at $12s. 6d.$ up to $13s.$ per cwt. *Madras* finger is worth $20s.$ per cwt., and is very scarce.

WAX (BEES).—A supply of 620 packages offered at auction, was almost entirely bought in, sales being made only of a few odd lots. Three packages ordinary rather dark *Jamaica* sold at $7l. 2s. 6d.$ per cwt. Five cases *San Domingo*, fair to brown dark and mixed, realised $5l. 17s. 6d.$ to $6l. 10s.$ One package *Australian* of fair mixed colour brought $6l.$ per cwt. *Madagascar*: 27 mats of fair to good mixed realised $5l. 17s. 6d.$; dull ditto, $5l. 12s. 6d.$ per cwt.

WAX (JAPAN).—Easier. Sales of good pale squares have been made on the spot at $38s.$ per cwt. For shipment, December-February steamers, $34s.$ per cwt., c.i.f. terms, is asked.

The Market in Heavy Chemicals.

The dull tone lately noted in the heavy chemical market still continues, and business is perhaps quieter than is usual even at this season of the year. Owing to the complete cessation of shipments to the Baltic ports, the demand for the various products from the Tyne and the Clyde is particularly quiet, and with the exception of recovered sulphur,

which is still scarce, most articles are moving only slowly. Calico printers and dyers are only faintly well supplied with orders. Carpet-manufacturers and papermakers are somewhat busier, whilst glassmakers are steadily employed on special orders. The Board of Trade Returns for November just issued show a continued increase in the exports of alkali. Alkali shipments to the United States still show a distinct and heavy decline, but, fortunately, increased shipments to other countries more than balance this. The total export of alkali for the months of November 1895, 1896, and 1897, were respectively 644,136 cwt., 414,780 cwt., and 472,170 cwt., and the full total for the whole year to date is also larger than that for last year. Bleaching materials remain practically as last year. As regards special points to be noted this week, we may mention that *Beaching-powder* is still in a very unsettled condition. The price is firm for prompt delivery, but for forward this is far from being the case, 5*l.* 5*s.* to 5*l.* f.o.r., maker's work, is the nominal figure. A declining tendency is also to be again reported in *Sulphate of ammonia*, although at present quotations remain practically unchanged from those last given. Seventy-six tons only were exported from Leith last week. *Sulphate of copper*, too, is weak, shipments are falling off, and prices are about 2*s.* 6*d.* per ton lower. South Durham *Salt* has dropped, but is now steady at 8*s.* 6*d.* per ton, f.o.b. Tees. *Caustic soda*, weaker tendency. *Salt-cake* very firm. Brown *Acetate of lime* steadily maintains its position, and tends upwards. *Benzols* are dull: 90 per cent., 1*s.* 9*d.*; 50 per cent., 1*s.* 11*d.* *Anthracene* is in better demand, 30*A.*, 5*d.*, and B, 4*d.* to 4½*d.* *Aniline oil* and salts, 3½*d.* *Carbolic acids* firm: crude, 75 per cent., 2*s.* 7*d.* to 2*s.* 8*d.*; crude, 60 per cent., 2*s.* to 2*s.* 1*d.*; crystals, 39°-40° C., 7½*d.*, and 34°-35° C., 7½*d.* *Nitrate of soda* very quiet, refined 7*s.* 9*d.*, and ordinary 7*s.* 6*d.* *Naphthas* are dull. *Chlorates of potash and soda* weak, and tend lower.

The Liverpool Drug-market.

Our Liverpool correspondent, writing on December 8, reports that the downward tendency in *Castor oil* has received a slight check, and prices have steadied somewhat, though there are several sellers at 3½*d.* for good seconds Calcutta, and even a shade less from the quay, but holders are looking for better prices in the near future, and will not part with their holdings freely. First pressure French has remained perfectly steady in value, and the price to-day for first pressure French is 3½*d.* per lb. All the other grades are unchanged. *Linseed* of all descriptions in very good demand; an advance of about 2*s.* per qr. has been established during the past few weeks. The movement in *Honey* continues strong, and holders are looking forward to better prices shortly. *Cream of Tartar* moves off slowly, without any quotable change in value. *Quillaia* is still meeting with a good inquiry, and sales are reported of good bark at 25*l.* per ton, with stocks rapidly getting into narrow compass again. *Fenugreek seeds* at auction sold at 9*s.* cwt. Importers are now asking 9*s.* 3*d.* per cwt. for good Alexandrian. For a large parcel of *Gentian root* 22*s.* 6*d.* cwt. was bid and refused—holders' view of value being 25*s.* cwt. *Blue Turkish Galls* are in small supply, and sales of good quality have taken place at 50*s.* cwt. For good *Russian anise* the holders are still firm at 18*s.* cwt. *Canary seed* is steady with few transactions at 26*s.* 6*d.* to 27*s.* per qr. for bright Turkish. *Gum acacia*: Soudan sorts continue to meet with rather more inquiry, and further business has been done in fair hard at 61*s.* cwt.; medium grades are somewhat inactive, but holders are firm, and there is no change to report. Sixty bags of Sierra Leone *Ginger* are reported as sold at 16*s.* 3*d.*, but the general price asked is 17*s.* to 18*s.* cwt. Ten sacks of Chilean *Beeswax* have changed hands at 7*l.* to 7*l.* 7*s.* 6*d.*, and owners are very firm in their views. In *Kola nuts* a small trade is being done, fresh selling at 3½*d.* per lb. Arsenic is firm at 21*l.* 10*s.* per ton.

The Amsterdam Drug-market.

Our Amsterdam correspondent writes, under date of December 8, that the *Cinchona*-market remains firm, everybody anxiously awaiting the result of the heavy auctions (equaling 40,793 kilos. sulphate of quinine) on December 9 (see telegram on page 928). *Quinine* shows no change, business in this article being very restricted. There has been rather more speculative demand for *Cubeb*s, and offers of 12*c.* per

half-kilo. have been refused for fair bold berries. But the stock, both in first and second hands, is very heavy. A parcel of 186 kilos. of Java *Vanilla* has been sold by tender at a secret price. The lot was valued at from 6*l.* to 10*l.* per half-kilo. There has been some trade in Java *Cananga oil*, of which about 100 bottles have been taken by dealers. The present value of good quality is about 7.50*l.* per bottle. *Cassia fistula* in pods is somewhat lower. About 200 baskets have lately been sold, but the price has not been made public.

Oil of Sandalwood.

MESSRS. W. J. BUSH & CO. (LIMITED), Artillery Lane, E.C., have issued a circular in which they say that a prejudice has been caused to both buyers and sellers of sandalwood oil by some chemists accepting as absolute the figures relating to its physical characteristics published by a firm in Germany. They therefore call attention to the results of their own observations and those of others, viz.:—

		Density at 15° [C.]	Rotation 100 mm.	Santalol per cent.
E. M. Holmès	<i>Pharmaceutical Journal</i> , March 27, 1886, p. 822	0.971	—	—
P. MacEwan	<i>Pharmaceutical Journal</i> , February 11, 1888, p. 661	0.970 to 0.990	—	—
Dr. Symes ...	<i>Pharmaceutical Journal</i> , February 11, 1888, p. 661	—	-15.0°	—
Schimmel & Co	Semi-annual Report, April, 1888	0.970 to 0.975	—	—
Schimmel & Co	Semi-annual Report, April, 1893	0.975 to 0.980	-17 to -20°	not below 90 (average 97)
R. A. Cripps	<i>Pharmaceutical Journal</i> , December 10, 1892, p. 461	not below 0.970	-18.8°	—
M. Conroy ...	<i>Pharmaceutical Journal</i> , September 2, 1893, p. 187	0.976 to 0.979	—	—
J. C. Umney	<i>Pharmaceutical Journal</i> , May 18, 1895, p. 1,044	0.975 to 0.980	-16° to -20°	—
E. J. Parry ...	<i>Pharmaceutical Journal</i> , August 10, 1895, p. 118	0.978 to 0.981	—	86 to 93
Squire's ...	"Companion to British Pharmacopœia," 1890	0.971 to 0.980	—	—
W. J. Bush & Co. (Limited)	—	0.971 to 0.982	-10.8° to -17.7°	* 91 to 98

* Messrs. Bush have seldom found the rotation so low as -11°, the great majority being between -12.5° and -17°, but the low figure quoted (-10.8°) was from a batch distilled by them from East Indian wood, exactly as in all the other cases.

The rotation figures in the last case are for monochromatic (D) light, but in the other cases the source of light is not stated; the figures for ordinary light (transition tint) would with most substances be considerably higher. Messrs. Bush add that it is evident from the above recorded results that English-drawn oil from East Indian sandalwood may vary in density from 0.970 to over 0.980, and it would appear from the two sets of figures published at different times by Messrs. Schimmel & Co. that, as might be expected, the German-distilled oil varies to the same extent. The rotation also may vary from -10° to -20°, and it is not advisable to fix narrower limits than these for density and rotation. They agree with previous observers as to the solubility in 70-per-cent. alcohol, all the oils of their own distillation having been found to be readily soluble in less than five times their volume at 20° C.

THE will and codicil of Mr. Cuthbert Wilks, retired chemist, Lincoln, who died on July 7 last, are proved by Mr. W. T. Page, retired bank-manager, and Mr. Frederick Andrew, solicitor, both of Lincoln. The personality of the testator is sworn at 4,987*l.* 15*s.* 4*d.* gross and 4,877*l.* 10*s.* 4*d.* net.



In writing letters for publication correspondents should adopt a concise, but not abbreviated, style. They are requested to write on one side of the paper only. Letters, with or without a nom-de-plume, must be authenticated by the name and address of the writer. Queries should be written on separate pieces of paper, and the regulations printed under the sections to which they apply should be strictly observed.

Chemists and the Hospitals.

SIR,—My attention has been drawn to the article in your issue of October 23, headed "How Chemists can help the Hospitals." I beg to thank you for the proposals it contains.

I further venture to hope that the chemists throughout the metropolis will make your proposal a success by taking it up as a labour of love, and using their influence to induce their customers to substitute a subscription-hook and stamp-album for the ordinary Christmas-card, as a present to their children especially, during the approaching season of festivity. I am strongly impressed with the feeling that very many thousands of Londoners, whose means are not large, will welcome this system, whereby they can give a small subscription to the hospitals year by year. Heretofore, small subscribers of from 2s. 6d. to 10s. have been discouraged, because their individuality has been sunk in anonymity in the reports. Up to the present no means have existed whereby they could possess evidence that they were regular subscribers to the hospitals. The guinea-subscriber has his name published in the annual report, but the subscriber of a few shillings is included in a general total under some such title as "Sums of less than 1l." I am of opinion that the hospitals, the patients, and the majority of Londoners, of the classes I have in view, all suffer by the system which has heretofore discouraged small annual subscriptions to our hospitals from the mass of the people, who cannot afford to give one guinea, but who could give from 5s. to 10s. per annum. The subscription-hooks and stamp-albums which the chemists are asked to take up and bring before their customers as a labour of love will give the humble subscriber due recognition, and secure that his gifts shall receive as much publicity as those of the wealthier and more prosperous classes.

There remains a further and stronger inducement: that thrift will be encouraged among all classes of the people, whose self-respect must thereby be increased and so much good must be done by increasing the public spirit of the citizens throughout the metropolis. An enterprising and well-known photographer in Regent Street has undertaken to take the portrait of 100,000 possessors of the subscription-books and stamp-albums who choose to give him three days notice and produce their album with the 1s. and 2s. 6d. stamps inserted, and he will mount the photograph in their books free of charge. I make no doubt that other photographers in other districts will show at least equal enterprise, and so the present of a subscription-hook to a child may prove in practice not only an inducement to thrift, but a means of affording real amusement to the possessor, who will be attracted by this offer of a free photograph, and be pleased to avail himself of it.

You have shown so much interest in this effort to attract and secure small subscribers to the Prince of Wales's Hospital Fund for London, that I venture to hope you may consent to secure the success of your proposal, so far as the chemists and druggists of London are concerned, by undertaking to publish a list of the names and addresses of the chemists who have these subscription-books and hospital-stamps on sale throughout London. If you will consent to do this and to give publicity to the names and addresses of such chemists week by week, not only in the interests of the hospitals, but in those of the chemists and druggists too, for they will have a new and constant business in these stamps and albums, which they may very properly and successfully undertake, seeing the number of people who apply to them when ill, you will be taking part in

a very useful work. I would suggest further that you should empower the honorary secretaries of the Prince of Wales's Fund to inform the public through the newspapers that they will find such a list in THE CHEMIST AND DRUGGIST, and that they may consult it at any chemist's shop, presuming, as I do, that every chemist of standing takes your paper regularly.

If the chemists and druggists of London will consent to become associated workers of the Prince of Wales's Fund, they ought to easily dispose of the stamps we have left, by the aid of the subscription-books, not later than January 1, 1898. In undertaking this work, and encouraging small subscribers to the hospitals, they will do a permanent service, not only to those institutions, but to the public life of Londoners, for the larger the number of people we can induce to take an intelligent and continuous interest in the hospitals the better must it be for the population who frequent them, seeing there is no force so fruitful in securing the maximum of efficiency and management as public opinion, backed by an exhibition of public spirit on the part of an important body of residents such as the chemists and druggists of London undoubtedly are.

I am, Sir, your obedient servant,

HENRY C. BURDETT.

The Lodge, Porchester Square, W., December 8.

[We are quite willing to publish the list referred to.—ED. C. & D.]

The P.A.T.A. Controversy.

SIR,—I am sorry Mr. Day relinquishes the fight in so ungracious a manner. His letter in no way suggests the graceful retirement of the unscarred victor. Stripped of its side issues, the whole controversy turned upon our ability as an association to so control supplies of articles upon our list as to render the cutting of these articles by any firm impossible, except at financial loss, which must soon end. Mr. Day has written folio upon folio in order that the trade should believe he has no difficulty in obtaining our articles. He has thrown out absurd challenges as to stocks he could show if I would "kind of" bet him he could not. My answer has been, and is, he could easily procure any supplies he wanted if he was prepared to buy them at retail prices. Against Mr. Day's statement we have to put—

1. The pledged word of P.A.T.A. proprietors not to supply him.
2. The pledged word of every wholesale house in the kingdom that he is not being supplied by them.
3. Direct evidence that he has bought supplies through retail traders at retail prices. Mr. Day himself admits this to the extent of 10% worth.
4. The failure of persons who could not have been recognised as our messengers to obtain some of the principal P.A.T.A. articles from Messrs. Day's branches because there were none in stock.
5. The statement of your correspondent last week, who said that whilst his supplies were stopped he tried to obtain P.A.T.A. articles from Messrs. Day's, but found they were out of stock.
6. And last, but by no means least, Mr. Day's own extraordinary exertions to wreck our movement. By letters in your own columns, reprints of them, circulars, private letters, and interviews with proprietors Mr. Day has fought like a man in dead earnest what he makes believe is an organised sham. He has urgently appealed to proprietors not to add their articles to our list, at the same time saying it did not matter to him whether they were on our list or not, because he could get them all the same.

The letter in which Mr. Day retires from the controversy contains nothing to which I have not replied, unless it is the personal attack upon myself. I presume Mr. Day's failure to weaken our organisation in the slightest has caused him to lose that self-control which we would expect to see exercised by so able an advocate. His statements as to my truthfulness and honesty of purpose are, I suggest, in the worst possible taste, and their insolence is in no way modified by Mr. Day's lame attempt to separate what he calls my "private life" from my "public capacity." Perhaps I ought to feel grateful to Mr. Day for the charitable way in which he seeks to excuse the man "whose public conduct," he says, "no honourable man will be at a loss to characterise." He is good enough to say that he does not suppose I am other than conscientious in my private life. Most men

will expect that a man's public acts and statements will be ruled by the same code of honour as that which governs his private life.

I am content to leave the efficacy of the P.A.T.A. to the judgment of your readers, to whom Mr. Day has appealed. The unanimous resolutions in support of our movement, passed during the past two or three weeks by public meetings of the trade at Chester, Derby, Leeds, Scarborough, Belfast, and Dublin, prove beyond all doubt that your readers know how to estimate Mr. Day's utterances. It is a significant fact that his letters were never referred to except as evidence of the growing power of our Association, and that the P.A.T.A. shafts had gone right home. So long as we continue to possess the confidence of the trade so long shall we always be proud to merit the antagonism of such opponents as Mr. Day. I thank you on behalf of our 3,000 members for the opportunity you have afforded us of replying to Mr. Day's letters. By so doing we had no hope of influencing Mr. Day, but I am glad to say the correspondence has materially strengthened our movement, for the very vehemence of Mr. Day's letters has convinced a number of those who had before remained neutral that a movement which could so palpably affect a big cutter was one which it was their bounden duty to support.

Yours faithfully,
W. S. GLYN-JONES.

An argument from an anonymous correspondent is as powerful as if it appeared over a well-known signature. But the mere expressions of opinion of gentlemen who conceal their identities cannot carry much weight. This must be our excuse for condensing the following letters:—

Prince Whitaker (28/50) assumes that the futility of the P.A.T.A. has been completely demonstrated. He now therefore ventures "to challenge the principle on which its tactics appear to be based. This may be described as the get-what-you-can principle." "P. W." (who, we may say, is one of our most esteemed correspondents) proceeds to argue against the practice of getting one price from one customer and another from the next. He does not attempt to show how this practice is encouraged by the P.A.T.A., but he adds, "Perhaps I may be told that such cases do not occur—that all the members of the P.A.T.A. in any given place agree to sell at a certain price, and stick to it; but certainly this is not the idea one gets from the *Anti-cutting Record*, and if it be the fact, why pay 5s. a year to the P.A.T.A. before making the local agreement? It has been proved that the Association cannot coerce manufacturers or stop supplies from retailers. Where, then, does it 'come in'?"

Fair Play (28/52), after some comments on Mr. Day's letters, expresses "our great pleasure at his dissatisfaction with Mr. Jones. We are in no way dissatisfied with him: he has formed the strongest body of representative, up-to-date, business-like chemists we have yet had, and far from dying, as Mr. Day would like to believe, we shall yet prove our strength to wavering proprietors." "Fair Play" refers to one whose representative asked him for permission to advertise on shop-front, and was told to add article to P.A.T.A., then he could do so; to which he replied that the firm would not do so yet for six months, for they thought the Association would be dead by then. "F.P." told him that by that time they would be much stronger than now, and should remember their kind friends who were anxiously waiting for them to die.

Red Dragon (29/3) sends an extract from a letter recently written by the manufacturer of a protected article to a chemist upon the "black-list," as follows:—"The agreement (signed by 'black-list' men) has nothing whatever to do with the P.A.T.A., and is not affected in any way by anything they may say, or do, or not do. . . . I have an understanding with the P.A.T.A. that so long as a signer of my own agreement faithfully keeps it by not citing . . . I can continue to supply him with . . . even though he may be upon the Society's 'black-list'; therefore I shall be happy to continue to supply you with . . . but my agreement must be complied with to the letter."

William's Valedictory Malediction.

(A long way after Browning.)

You'll observe Sir, I have smashed Him, smashed him flat as with a buffer,
Him and It, the thing accursed; yet although I soundly rate 'em
Loud and long with bluster frantic, I can see—e'en though I suffer:
Suffer much as you will notice, Sir, from *Capitum inflatum*—
That the end of It is not yet, for although I call Him "liar,"
Raving much in words hysteric as my language grows uncouth,
Still He smiles and bobs serenely, and my wrath it mounts still higher,
For he doesn't seem to mind it—rather likes it—the "Un-truther."
And the Trade, I hear them snigger as I prate of "truth" and "justice,"
And protest they know no Cutter who is "fair" and "honourable,"
So no more the oil of midnight I shall burn in vain endeavour
To hoodwink with verbose nothings such a disrespectful rabble.
W. C.

Proprietary Trade.

Midlander (31/21) writes:—"I estimate that 25 per cent. of my returns are for stamped proprietaries yielding a gross profit of about 5 per cent. Other proprietaries (not my own) make up another 10 per cent. of my returns, with a gross profit of about 10 per cent."

Nitrates in Drinking-water.

SIR,—In a note on this subject, by Dr. J. C. Thresh, published in *THE CHEMIST AND DRUGGIST* last week, the author considers that analysts are prone to take one or other of the extreme views with reference to the significance of nitrates in drinking-water. "Either," he says, "they have held that the estimation of nitrates was of no importance, or that the amount of the nitrates was one of the most important factors in determining the purity of a water." I cannot agree with Dr. Thresh in this. All the water analysts I know certainly hold the latter extreme view—that the determination of nitrates is of paramount importance in estimating the value of a drinking-water; but I know of none who hold the former view. It goes without saying that all analysts who profess to know anything about water, hold that normal opinion which Dr. Thresh emphasises—viz., that the source of the water and its surroundings necessarily fix the relative value of the analytical figures, in the case of the nitrates as in other cases. A cursory glance at the report of the Rivers Pollution Commission of 1868, published in 1874, is sufficient to show that the chemists of that time were as fully alive to these facts as we are to-day. Many samples of water, examined and reported on as unpolluted by that Commission, contained from 1 to 2 parts of nitrogen as nitrates per 100,000, especially when taken from the deep wells in the chalk, magnesian, limestone, or coal-measures. The average value in nitric nitrogen for the water (unpolluted) drawn from the deep wells of the magnesian limestone and examined by the commission was 1.426 parts per 100,000, and from spring-waters in the same stratum, 1.686. In many cases it exceeded 2 gr. per gallon.

How completely the source conditions the inferences to be drawn with regard to the nitric nitrogen is, and has, for many years, been well exemplified in the case of the waters drawn from the greensands. Here absence of nitrates and presence of large quantities of free ammonia is frequently evidence of very old contamination, older than that evidenced by the presence of nitrates in similar water. The greensands contain notable quantities of ferrous oxide, which will reduce the nitrates to ammonia or nitrogen, and so destroy the evidence of past contamination, if based only on the presence of nitrates. The evidence of past experience, as exemplified by the Thames water, appears to me to be very weak. In every case where we have had epidemics due to foul water supply, had not this water been drunk with impunity, in some cases for a considerable time? What was the evidence of past experience worth there? Those who live up the Thames as I do and see to what sources of contamination

this river is liable are not satisfied with this evidence of past experience. The sooner the Thames is replaced by some suitable source as our Metropolitan water supply which has not the drainage of some million inhabitants flowing directly or indirectly into it, the better it will be. I can fully confirm what Dr. Thresh says about the necessity for due care and time in the copper-zinc couple process for estimating nitrates. Often after thirty hours nitrous acid can be detected in the liquid, and before estimating the resulting ammonia, this should be tested with meta-phenylene-diamine.

Yours faithfully,
E. J. PARRY.

Mr. T. G. Forshaw and the Pharmaceutical Council.

SIR,—It is always somewhat humiliating to be refused entrance to a society or to be removed therefrom. But when this latter is done, and in a somewhat surreptitious and insidious manner, it is, in my opinion, doubly degrading. I was first made acquainted that my name had been removed from the list of M.P.S. on taking up THE CHEMIST AND DRUGGIST last Friday, the Council apparently being in no hurry to acquaint me with their decision. I subsequently, on Saturday morning, got a formal intimation from Mr. Bremridge, asking for the return of my certificate of membership, and requesting me to forthwith discontinue using any title by which the public might think I was connected with the Society. Now, Sir, my name has been removed without the slightest explanation, and in spite of the fact that I unconditionally, at the wish of the Council, suppressed an advertisement which they deemed "subversive of the interests of the Society." In writing to Mr. Walter Hills on October 20 last I explained to him that I willingly withdrew the advertisement, but, as my name was constantly connected with similar announcements, would the Council please point out what portion they deemed objectionable, so that I might avoid future transgression. To this the President personally replied, and said my letter should receive consideration. The only consideration it has received, as far as I am aware, was to bring a motion for the removal of my name, for from the time Mr. Hills replied up to the moment I took up the *C. & D.* last Friday, I had received absolutely no communication from the Society in any shape or form.

I cannot, of course, judge as to what your readers may think about the action of the Council; for my part, I feel very strongly about it, and consider it scandalous that a body of gentlemen should have removed my name in spite of the fact that I fulfilled their requirements by withdrawing the advertisement, and yet five weeks afterwards my name is removed without giving me the slightest chance either to explain or vindicate my position.

So your readers may know in what manner my advertisement was judged "contrary to or subversive of the interests of the Society," may I beg you to find place for the "Case from Batley," upon which alone—seeing I have had no further complaint from them—my name has been erased.

I am, &c.,

T. GARRATT FORSHAW.

The Infirmary Pharmacy, Bradford.

[The advertisement referred to is a lengthy one, which we cannot make room for. It is a sworn statement by a woman who suffered from certain aches and pains, and who, after trying medical men, chemists, herbalists, and patent medicines, began to despair, when a friend informed her "of the wonderful cures being daily made by Messrs. Forshaw & Snow, M.P.S., A.S.A., Consulting Medical Chemists by Government Diplomas, The Infirmary Pharmacy, 138 Westgate, Bradford." A marvellous cure resulted.—ED. *C. & D.*]

Re Rectification of the Register.

SIR,—Some years since I had the temerity to suggest to the Registrar an improvement in his mode of notification that a name would be erased—viz., that in place of sending two registered letters he should first send an unregistered one. My argument was that in cases where the registered person had removed to another address an unregistered letter would be taken in and re-addressed, whereas a registered one would be refused. Mr. (E.) Bremridge admitted the sweet reasonableness of the idea, but dismissed me with the usual official *non possumus*—he "had to carry out the

Act" of Parliament. Is there any prohibition in the Act or the by-laws against the sending of an unregistered notice? I still think it would be a saving of trouble and expense.

I am, Sir, yours truly,

38 Southwark Street, S.E.,
November 26.

J. HEARN.

Alleged Death of a Chemist from Worry.

SIR,—Permit us to refer to a report which appeared in your last issue headed:—"A Chemist's Death from Worry." The suggestion that the deceased died suddenly in consequence of work and worry in our business is most unfair and unjust. We yield to no one in regretting that the unfortunate young man should thus suddenly have been cut off in the prime of life, but this does not prevent us from indignantly repudiating the implied charge that we either overworked or worried him. The medical evidence showed that he died from apoplexy, and the verdict of the jury was death from natural causes. Although the doctor who made the *post-mortem* admitted that the apoplexy might have been produced by worry, everybody knows that apoplexy usually arises from other causes, and there is no reason why such other causes should be excluded in this case. Anyhow, we are quite certain that there was nothing whatever, either in the amount or nature of the work done by the deceased, or in our treatment of him, which would be calculated, in the least degree, to produce such a result in any ordinary individual. We do not think that anyone in our employ worked so few hours as the deceased, and a great part of his time was taken up in riding on tram, bus or train to one or other of our shops, and looking round and reporting anything which he thought might be of interest to us. Speaking generally, except when stocktaking, he worked just as many or as few hours as he thought necessary, and he was never once urged to work more hours than he did. The letters from us found upon him, and other letters which we have written him, which are now in the possession of the relatives, would show the cordial relations which existed between us, and the appreciative manner in which we wrote him. The change in his demeanour, which some thought that they had noticed lately, and which it was suggested might be due to worry in opening shops, could not possibly have arisen from that cause, as five months have now elapsed since he had anything whatever to do with opening any shops for us, except one call at Walham Green on the morning of November 22. The suggestion that we refused to give him a character is equally baseless, as at the time of the last interview with him by any of the management, there was no question or hint of his leaving our service, and our letters are evidence that we never hinted at anything of the sort. Of course we should have given him a character if it had been required, and we can only attribute the origin of the statement to the deceased having been the victim of an hallucination, or to the mind of the bereaved widow having been upset by grief. We always treated the late Mr. Akeroyd with the greatest kindness and consideration, and his work was neither arduous nor exhausting. What sources of anxiety he may have had outside the business we do not presume to say, but we protest against the assumption that death from apoplexy has any necessary connection with either work or worry. It is very painful to us to have to advert to this subject, but we could not allow such a cruel and baseless suggestion to pass unnoticed. Unfortunately, such rumours, when once put into circulation, cannot always be counteracted, even by the clearest evidence; and in this case it is, of course, very difficult to prove a negative.

We are, Sir, yours truly,

THE DIRECTORS OF DAY'S METROPOLITAN
DRUG COMPANY (LIMITED).

[The evidence as reported by us distinctly exonerated Messrs. Day from blame.—ED. *C. & D.*]

Dr. Priestley's Compound.

SIR,—An exhaustive analysis of a bottle of Dr. Priestley's compound taken from the same stock as those supplied to Dr. Scott's patients has been made in the laboratory of an F.R.S. A separate examination of the bismuth preparation used has also been carried out by Messrs. Howar's & Sons—the result in each case has proved the absence of even a trace of lead. When one considers the amusingly inaccurate

analysis of the compound published by Dr. Scott in the *Lancet*, it is not to be wondered at that he discovered lead in a complex mixture of organic and inorganic substances containing bismuth.

I am, Sir, yours truly,
THE PROPRIETOR OF DR. PRIESTLEY'S COMPOUND.
Eastwood, near Nottingham, December 8.

LEGAL QUERIES.

We do not give legal opinions by post. Information regarding most legal matters in connection with pharmacy will be found in THE CHEMISTS' AND DRUGGISTS' DIARY, and in "Pharmacy and Poison Laws of the United Kingdom," and Alpe's "Handy-book of Medicine-stamp Duty."

22/23. *Nil Desperandum* asks: "Can the Pharmaceutical Society recover a fine from a youth under 16 years of age for selling poisons?" They can.

23/22. *Jeffry*.—The law requires that when you sell poisons you shall label them with the name of the poison with your name and address. Whether "Blank, chemist, Sheffield" is a sufficient address would be a question for a Court to decide when the case came before it. "Blank, chemist, London," we should say, would not be sufficient, though "Blank, chemist, Dulltown" (supposing Dulltown to be a little place of 5,000 to 10,000 inhabitants) would. Whether it would be a sufficient compliance with the law for a chemist with two or more shops to have labels printed with all his addresses is another question which we cannot definitely answer. The right way to comply with the law is quite obvious.

23/14. *Nephritis*.—We have not kept your bill, and cannot therefore now reply to your question. You first send your bill and put your query vaguely, then you put your question specifically but do not send your bill, and then you blame us.

23/71. *W. F.*—Read article in the *C. & D. DIARY* about registration of trade-marks, and if that does not tell you what you want to know, ask us a specific question. We can hardly advise on the general advantage of registering labels. (2) You may use a fictitious name with your cough-mixture, but you had better not use the name of any living doctor without his consent. He could get an injunction against such unauthorised use of his name.

24/23. *Verax*.—If you gave notice on November 11, you leave on December 11 when your day's work is done.

20/18. *Nux*.—Section 15 of the Pharmacy Act, 1863, expressly reserves the title "pharmacist" to pharmaceutical chemists.

26/25. *Alpha*.—For registration of trade-marks see *C. & D. DIARY*.

30/1. *H. B.*—It is not illegal to perform dental operations, nor is it illegal to describe yourself as a teeth-manufacturer. We should be disposed to assist in the defence of any chemist who might be prosecuted under the Dentists Act for such alleged offences, if the case were otherwise a clean one.

30/15. *J. A. F.*—We presume the firm named have taken a patent for the combination of yolk of egg in soap. We know of no other means by which they could secure the sole right of such manufacture. This right is quite distinct from the property in a word. By the strict letter of the law, we presume you could not claim the right to say that your preparation was made with vaseline, &c. The law says that the owners of the trade-mark have the sole right "to use" such mark.

23/51. *Nux Vom.*—A limited company can keep open shop for the sale of poisons without breaking the Pharmacy Act, but the person who actually sells the poison is liable to a penalty if he is not qualified.

30/33. *W. C.*—We do not see how any one can tell you what proportion of the revenue from medicine-stamps is

contributed by Scotland. Mr. Beecham, for example, buys stamps in England. The Board of Inland Revenue cannot tell where his pills are sold.

29/23. *Nemo*.—The possibility of damages being obtained against the maker of an inflammable hair-wash in the event of an accident depends so entirely on the evidence that we cannot lay down any rule. A label, "Highly inflammable, must not be used near a flame," would in most cases, we should think, suffice to prevent any risk of such damages being awarded. You can get the Liverpool Price-list from Mr. Silverlock.

23/70. *F. D.*—No High Court decision has yet declared whether chemical-preservatives in food are legitimate, and magistrates have decided both ways, as you may see if you look through our legal reports of the past year. We do not recollect any case of preservatives in jams especially.

MISCELLANEOUS INQUIRIES.

We reply to our subscribers and their employés only; queries must, therefore, be authenticated by the name and address of the subscriber. When more than one query is sent write each on a separate piece of paper. When a sample accompanies a query full particulars regarding the origin and use of the sample must be given, and the name of the querist should be placed on the sample. Queries are not replied to by post.

12/49. *Benoni*.—Peacock's Bromides is a proprietary preparation regularly advertised in the *C. & D.* by Mr. Kuhlenthal. Please refer to the advertisements.

12/37. *R. S.*—We shall publish a book shortly on the treatment of common complaints, which will just suit your requirements.

12/11. *Errator*.—(1) Sensitive Dentine.—The usual arsenic-and-morphine obtunder is used for sensitive dentine, such as the following:—

Arsenious acid	...	...	...	gr. xv.
Acetate of morphine	...	...	...	gr. v.
Creosote	...	...	...	℥xv.

Make into a thin paste, and stiffen it with powdered alum.

(2) Liq. ferri perchlor. fort. is used for stopping the bleeding of the gums when solution of tannin in tincture of myrrh fails.

12/42. *Nemo*.—Bismarek Brown is not poisonous in the ordinary sense, and can be used with safety for colouring sweets, provided the quantity employed does not much exceed 5 gr. to 1 lb. of sugar.

12/43. *T. S. J.*—Lime-cream.—See *C. & D.*, May 8, 1897, page 748.

12/19. *Puller*.—(1) Dental Anæsthetic.—Cocaine hydrochloride is, on the whole, the best and safest local anæsthetic. The quantity administered is $\frac{1}{2}$ gr. to 1 gr., according to the age and sex of the patient. (2) Bleaching Fowl's Feathers.—Hydrogen peroxide is best for this purpose. The feathers should previously be washed with benzine, to remove any fat which might prevent the action of the peroxide.

12/39. *H. C.*—The book you want is "The Royal Road to the B.P." You may be able to get it from Kimpton, High Holborn.

9/70. *Tish* wastes stamps by writing to us without his name and address.

6/32. *Tom Tit*.—We do not know who is promoting the next exhibition at Earl's Court. When the information is communicated to the press we shall give it.

11/1. *D. W.*—(1) Gelosine is a purified agar-agar, which came into the market eleven years ago, but we have not heard of it for some time, and cannot say whether it is in the market or not; but we shall inquire. Gelose is the peculiar principle of agar-agar, but it has not been used for making suppositories. Agar agar itself is so used, and most

commercial samples of it are quite suitable for the purpose. See *C. & D.*, August 24, 1895, page 316. (2) Mica Frost, generally called "Jack Frost," you can get from any English sundries house in 6d. boxes.

5/23. *B. P. C.*—There is no book published on the manufacture of synthetic perfumes. Most of them are covered by letters-patent.

14/26. *F. A. R.*—Household Ammonia.—See *C. & D.*, June 26, page 1013.

13/12. *Rheum.*—Evanescence Ink.—Weak solution of iodine. Write on glazed paper.

79/24. *J. E. B.*—Wine-essences.—The last two volumes of the *C. & D.* contain a dozen formulæ for wine-essences. See *C. & D.*, January 30, 1897, page 175, and November 21, 1896, page 751. Most subscribers can refer to these as the season comes round.

14/69. *Aloin.*—We have not the slightest idea what "Yanatas" is made of.

83/31. *Steel.*—Your question about the hardening of steel cannot be answered offhand. Indeed, it strikes the problem which metallurgists are continually attacking with rare success. Roger's steel, which is about the best and hardest in the market, is kept for years in the open air after it is made, in order, apparently, to allow some molecular change to take place. But that is not everything; the hardness depends chiefly upon the composition of the steel, and if you have a poor one to begin with you can never get it to the hardest point.

19/97. *Hirudo* (Toronto) is troubled about the meaning of Phagocytosis. He has read THE CHEMIST AND DRUGGIST from No. 1, and never found a word in it that could not be understood and appreciated by the meanest comprehension until we quoted Hugenschmidt to the effect that the saliva causes the absorption of a wen by active phagocytosis.—We are sorry we spoke. Phagocytosis is the action due to phagocytes, and phagocytes are leucocytes which have the power of feeding on bacteria by besieging them, enclosing them, and eating them up.

5/71. *Rowley.*—The Ointment for Swellings is a somewhat crude mixture of beef-dripping, beeswax, and saltpetre.

13/65. *Ammoniac.*—Electric Light.—Three to four quart bichromatic cells will be required for two 8 or 16 candle-power electric incandescent lights. Two pounds should cover the cost of the installation at the outset, but you will find the up-keep of the batteries rather expensive.

253/45. *Glacies.*—There is no simple method of ice-making without the use of machinery.

252/3. *Tismach.*—We have a book in the press which will suit you. It will be ready in January.

17/12. *Raja.*—Look over the numbers for October, and you will find a formula for petroleum emulsion under correspondence. See also the DIARY for 1897.

17/55. *E. C. S.*—You can dissolve the gold out of the scrapings of the shop-labels by means of nitro-hydrochloric acid; but, as there is likely to be copper in it you will need to get rid of that by treating with nitric acid. Is it worth while, however? You are not likely to get 3d. worth of gold from a dozen bottles. It is labour chiefly which you pay for when you buy labels.

9/53. *D. & S.*—Inseparable White Liniment.—The following formula gives a nice non-separating embrocation:—

Ol. terebinth....	...	...	...	5vj.
Ol. camph. ess.	...	...	...	5ij.
Ol. nucis	...	...	...	5iv.
Ovi	...	...	...	ij.
Ac. acetic.	...	...	...	5ij.
Aquæ ad	...	...	...	Oj.

Mix the egg with the turpentine in a mortar, strain into the bottle, add the other ingredients, and shake till the emulsion is formed.

76/36. *T. M.*—There is nothing better for Cleaning and Polishing Copper than rotten stone made into a paste with heavy petroleum oil.

9/44. *Oleum.*—Boot-polish.—Refer to *C. & D.*, May 1, 1897, page 712.

20/23. *Salop.*—(1) Both the cough-mixtures are good, and show originality. The formula which you now send has the advantage of containing no legal poison, and would on that account be more suitable for making a speciality of. (2) The belladonna and nux vomica in the Liver-pill formula, *C. & D.*, page 812, are added because of their peculiar action on the muscular coat of the intestines, whereby peristalsis is much increased. It is questionable whether anyone could poison themselves with these pills. (3) We have not searched the pills you mention for scheduled poisons.

13/54. *In Perpetuum.*—Saccharum Fæx is treacle, which the B.P. says is of a golden colour. The kind formerly official was dark reddish brown. Your mixture will be light in colour.

14/10. *Berks.*—Your sample of Nursery-ointment is made from a formula like one we gave in *C. & D.*, August 8, 1896, page 270.

18/47. *Virum.*—A solution of citrate of iron and quinine sometimes deposits after a few days. Let your mixture stand a week before filtering.

18/36. *X. Y. Z.*—The directions for using the Shampoo-powder, page 811, are:—"Dissolve the contents of this packet in a sufficiency of warm water to form a shampoo-liquid, rub well into the skin of the head to produce a lather, and rinse off with either warm or cold water."

16/74. *Cera Flava.*—(1) We formed an idea that the mixture was principally diuretic in its action. A mixture containing citrate of potash, solution of acetate of ammonia, and infusion of gentian would be suitable. (2) Ask your bookseller about a Pocket Latin Dictionary; there must be plenty published.

16/44. *X. Y.*—Poultry-powder to promote laying eggs:—

	Oz.
Powdered black pepper	... 1
Powdered fenugreek	... 1
Powdered allspice	... 1
Powdered ginger	... 1
Powdered bone-ash	... 4
Linseed-meal	... 4

Mix.

Four tablespoonfuls to be mixed with the food for twenty hens once daily.

16/1. *E. H.*—Cooling and Teething Powders:—

Potass. chlor.	...	...	gr. ij.
Pulv. scammi. co.	...	...	gr. ij.
Pulv. sacchari	...	...	gr. ij.

M.

Dose: For a child of 6 months, half a powder; above 6 months, a whole powder.

28/11. *Sufferer.*—Gleet.—The matter is one on which we cannot advise you.

27/62. *Mit.*—Dispensing for Doctors.—If you supply the medical man with his drugs, the charge for two hours' work by one of your assistants in his dispensary, every day, should be nominal—say 1s. to 1l. per week.

29/11. *C. M.*—We shall publish a book shortly which will meet your wants. Most of the books of synonyms are now out of print, and they do not cover the field quite fully.

28/64. *Ajax.*—The best way to make Essence of Vanilla from the bean is to chop up 1 oz. of it, add 1 gr. of powdered musk and 5 gr. of carbonate of potash. Put into an infusion-jug and pour upon it 4 oz. of boiling water; stir, and allow to stand till quite cold; then add 16 oz. of rectified spirit; macerate for four days and filter.

11/22. *Tickets*.—(1) We believe Ticket-writers use Chinese white (a preparation of oxide of zinc) in place of Make white (a lead carbonate), as it works better and is beautifully white. (2) For the centre of your Christmas-window you might fix up a model of a still "showing how your lavender-water is made." Put plenty of lavender-flowers and bottles of lavender-water about. Consult a chemical-apparatus catalogue for a model of a still, or see our DIARY for 1893, where one is illustrated.

10/66. *Sauce*.—(1) There is a suitable formula for sauce of the Worcester type in *C. & D.*, March 27, 1897, page 526. (2) The addition of formalin will keep draught sauce indefinitely.

10/27. *Terrier*.—Lotion for Dry Eczema on Dogs.—This consists of a weak solution of creolin tinted with tr. lavand. co.

29/96. *G. D. Co.*—Fehling's Solution is used for detecting sugar in urine. When two or three volumes of the urine are boiled with one volume of the solution a red precipitate indicates the presence of sugar.

15/62. *J. J. F.*—The emulsion is not bad, but the oil-globules are rather large. We know of several chemists who make an emulsion in the same way, and they all, like you, claim that it is the best in the world; which seems to be a failing whenever anybody begins to feel proud of their cod-liver-oil emulsion. You say that Smith has no right to say that his emulsion is better than everybody else's, but you immediately go on to say that your's is better than Smith's, and Jones's, and Robinson's, "and others." Still, we agree that such statements as you complain of are better unsaid.

258/66. *City*.—Your sample of Hair-dye is made as follows:—

Pyrogallie acid	...	...	...	3ij.
Rectified spirit	...	...	...	3ss.
Water...	...	...	...	3iss.

Mix.

21/45. *H. S.*—Guiterman & Co., 35 and 36 Alderman-bury, E.C., can supply celluloid shavings for varnish. The varnish ready prepared is an article of commerce.

21/66. *Smilax*.—Heel-ball.—The best heel-ball is a black residue obtained in purifying ceresine. The white ball is a mixture of paraffin with a little beeswax (about 3 of the former to 1 of the latter). The melted mixture is poured into tin moulds.

21/62. *Bromide* inquires: "What powder is used to assist in plucking ducks quickly?" [*Farina*.]

21/59. *B. A.*—Toilet-cream:—

Pulv. ac. borici	...	...	...	3iss.
Pulv. zinci oleatis	...	...	...	3iss.
Ol. amygdalæ...	...	...	...	3j.
Lanolin	...	...	...	3j.
Otto rose	...	...	...	℥v.

M.

21/9. *Contented One* has not sent his name and address. If he confirms the letter sent he must give dates and more precise particulars before we take the onus of publication.

* * Several pages of letters and replies to correspondents are in type which we cannot find room for this week.

INFORMATION WANTED.

The Editor will be obliged for replies to the following from any who can furnish the information.

31/28. Sledge brand of condensed milk: maker's address.

29/52. Who are makers of serpents' eggs?

30/5. Who supplies ants' eggs for feeding fish?

31/10. Name and address of makers of hair soles.

DAISY (LIM.) makes a special offer this week of seasonable window attractions.

Coming Events.

Saturday, December 11.

Pharmaceutical F.C. v. Melrose Rovers, at Wormholt Farm. Kick off at 3 P.M.

Monday, December 13.

Pharmaceutical Society of Ireland, 67 Lower Mount Street, Dublin, at 8 P.M. Subjects: "Pills and their Difficulties." Country members are invited to send notes or papers.

Tuesday, December 14.

Royal Photographic Society, Society of Arts Theatre, John Street, Adelphi, at 8 P.M. Subject: "Colour Photography," by Professor Gabriel Lippmann.

Bradford and District Chemists' Association, Great Northern Victoria Hotel, at 9 P.M. Confidential conversation. Edinburgh Chemists' Assistants', and Apprentices' Association, Oddfellows' Hall, Forrest Road, from 8.30 to 11 P.M. Social and musical evening. Tickets, 1s. 6d. each (which include refreshments), may be obtained from members of the committee, or from the Secretary, 117 Prince's Street.

Wednesday, December 15.

Western Chemists' Association (of London), Westbourne Restaurant, Craven Road, W., at 9 P.M. Address by the President (Mr. J. H. Mathews).

Royal Microscopical Society, 20 Hanover Square, W., at 8 P.M. Subject: "A new form of Photographic Camera, and Condensing System," by Mr. E. B. Stringer, B.A.

Forfarshire and District Chemists' Association, Lamb's Hotel, Reform Street, Dundee, at 4 P.M. Discussion on Federation Associations' programme.

Midland Chemists' Assistants' Association, Exchange Restaurant, Birmingham, at 9.15 P.M. Subject: "Poisons," by Mr. F. Casson.

Brighton Junior Association of Pharmacy, Newburg Hall, at 9 P.M. Social evening. Chairman, Mr. C. G. Yates.

Pharmaceutical Society, 36 York Place, Edinburgh, at 8.30 P.M. Proceedings: "Fluid Extract of Liquorice," by Mr. Peter Boa. "The Metric System in Prescriptions," by Messrs. T. T. Dewar, M.D., B.Sc., and James Jack, F.L.S. "True and False *Cactus Grandiflora*," by Mr. Gordon Sharp, M.D. "Additions to Library and Museum."

Society of Chemical Industry, Nottingham Section, Midland Hotel, Derby, at 7 P.M. Papers: "The Manufacture of Sulphur from H₂S," by Mr. F. J. R. Carulla, and "The Estimation of Cuprous Oxide by means of Standard Potassium Permanganate Solution," by Messrs. R. M. Caven, B.Sc., F.I.C., and Alfred Hill.

Chemical Society, Burlington House, at 8.30 P.M. Extra meeting. Kekulé Memorial Lecture by Professor F. R. Japp, LL.D.

Society of Arts, John Street, Adelphi, W.C., at 8 P.M. "The Purification of Sewage by Bacteria," by Dr. Samuel Rideal.

Thursday, December 16.

Chemists' Assistants' Association, 73 Newman Street, W., at 9 P.M.

Adjourned discussion of the proposed alteration of Rule 6. Chemical Society, Burlington House, W., at 8 P.M. Papers to be read: "Stereo-chemistry of Unsaturated Compounds," Pt. I: "Esterification of Substituted Acrylic Acids," by J. J. Sudborough, Ph.D., and Lorenzo Lloyd. "Formation and Hydrolysis of Esters," by J. J. Sudborough, Ph.D., and M. E. Feilmann, B.Sc. "A New Method of Determining Freezing-points in very Dilute Solution," by M. Wilderman, Ph.D.

Friday, December 17.

Aberdeen Junior Chemists' Association, 21 Bridge Street, at 9.30 P.M. Subject: "Ice-water and Steam," by Mr. A. Findlay, M.B., B.Sc.

Sheffield Microscopical Society, Rutland Institute, Chapel Walk, at 8 P.M. Practical night, conducted by members.

PROFESSOR LIPPMANN'S LECTURE.—The secretary of the Royal Photographic Society asks any of our readers who desire to be present at Professor Lippmann's lecture notified above, to apply early for card of admission to Mr. Child Bayley, assistant secretary, Royal Photographic Society, 12 Hanover Square, W.

ROYAL INSTITUTION.—The following are amongst the lecture arrangements before Easter:—Professor Oliver Lodge, six Christmas lectures for young people on "The Principles of the Electric Telegraph"; Professor Dewar, three lectures on "The Halogen Group of Elements"; National Gallery, Professor J. A. Fleming; Professor Patrick Geddes, three lectures on "Cyprus." The Friday evening meetings will begin on January 21, when Sir John Lubbock, Bart., M.P., will lecture on "Buds and Stipules." Mr. A. A. Campbell Swinton, Dr. J. Hall Gladstone, Professor J. E. Thorpe, and Professor Dewar will also deliver lectures during the session.